EFFECTIVE DATE 04-2005

THE GAYLORD VENTILATOR TECHNICAL MANUAL

FOR THE "CG3" SERIES WATER-WASH VENTILATORS WITH MODEL C-6000 COMMAND CENTER

GAYLORD INDUSTRIES
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"Undisputed World Leader in Engineered Systems for Commercial Kitchens"tm

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If you have further questions, please visit our web site at: www.gaylordusa.com, or call us toll-free at 1-800-547-9696. We are more than happy to help.

Sincerely,

Gaylord Industries

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CG3 VENTILATOR DESCRIPTIONS

There are 5 different types of **CG3** "Classic Gaylord", water-wash ventilators. The differences involve the type and location of fire damper and whether the ventilator has a fire damper. The first part of the model number indicates the type of ventilator, see below:

Explanation of Prefixes:

CG3 ..... Water-wash ventilator with three-position, thermostatically activated (electric) damper at air inlet slot.**[With Damper motor and 1 or more Thermostat(s)]**

CG3-FDL ... Water-wash ventilator with three-position, thermostatically activated (electric) damper at air inlet slot. A bracket (Fire Damper Lockout) has been added to prevent the damper from closing to the fire position.**[With Damper motor and 1 or more Thermostat(s)]**

CG3-FDD ... Inlet damper is fixed, and there is a weighted fuse link activated fire damper located at the duct collar. **[No Damper motor, No Thermostats]**

CG3-FDT ... Inlet damper is fixed, and there is a weighted fuse link activated fire damper located at the duct collar, and there is a single thermostat to activate the fire mode in the control cabinet and ventilator. **[No Belimo, One Thermostat]**

CG3-ND Inlet damper is fixed. No Fire Damper at duct collar. A bracket (Fire Damper Lockout) has been added to show that the damper will not close to the fire position. **[No Damper motor, No Thermostats]**

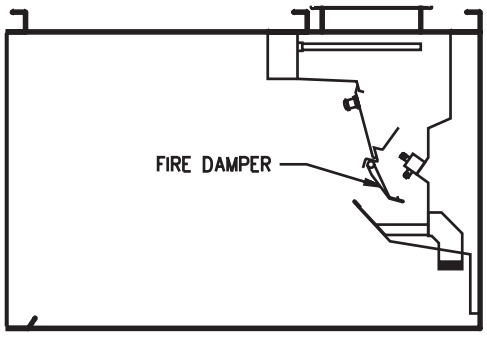
Summary of CG3 Ventilators:

The CG3 and CG3-FDL are very similar. Both have a damper motor that closes the inlet damper during the wash mode and stays closed until the exhaust fan is started. Both have thermostats that can detect an "Internal Fire". The main difference is the CG3-FDL has a Fire Damper Lockout (FDL) bracket added that prevents the inlet damper from closing to the fire position, so it does NOT have a fire damper.

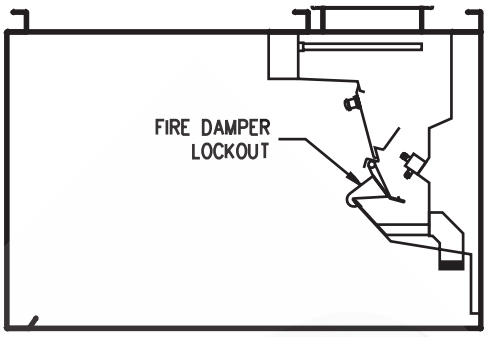
The CG3-FDD and CG3-FDT are similar to each other. Both have fixed inlet dampers and do not have damper motors. They both have fuse link activated fire dampers in the duct collar that will close when the temperature reaches 250°F. The CG3-FDT has an added thermostat that will detect an "Internal Fire" and activate the "Internal Fire Mode". The CG3-FDD does NOT have any thermostats.

The CG3-ND has a fixed inlet damper and does NOT have a fire damper.

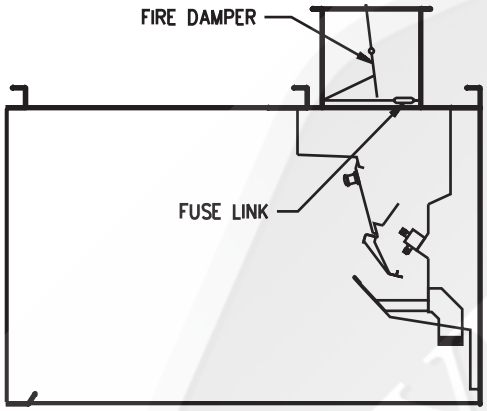
CG3 VENTILATOR DESCRIPTIONS



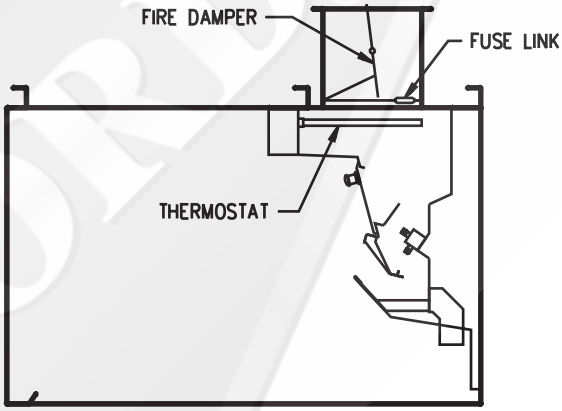
CG3 SERIES
ELECTRIC INTERNAL DAMPER
[W/DAMPER MOTOR &
THERMOSTAT(S)]



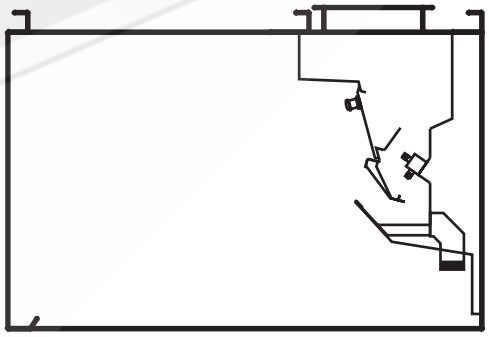
CG3-FDL SERIES
FIRE DAMPER LOCKOUT
[W/DAMPER MOTOR &
THERMOSTAT(S)]



CG3-FDD SERIES
FUSE LINK DUCT COLLAR DAMPER
[NO DAMPER MOTOR, NO
THERMOSTAT(S)]



CG3-FDT SERIES
FUSE LINK DUCT COLLAR DAMPER
[NO DAMPER MOTOR, ONE
THERMOSTAT]



CG3-ND SERIES
NO DAMPERS
[NO DAMPER MOTOR, NO
THERMOSTATS]

GREASE EXTRACTION

The Gaylord "CG3" Series Ventilator extracts up to 95% of the grease, dust and lint particles from the airstream passing through it, when operated and maintained in accordance with design specifications.

The hot, contaminant-laden air rising from the cooking surface merges with the higher velocity air that wipes the front of the cooking equipment and extends, like an air blanket, from the front edge of the cooking equipment to the air inlet of the ventilator. As the air moves through the ventilator at a high speed, it is forced to make a series of turns around three baffles. As the high velocity air turns around each baffle, the heavier-than-air particles of grease, dust and lint are thrown out of the airstream by centrifugal force. The extracted grease, dust and lint are collected in the interior of the ventilator, remaining out of the airstream until removed daily by the wash cycle.

Baffle #1

This baffle, located at the air entrance of the ventilator, is a three position damper. Position 1 is the exhaust on mode as shown in Figure 1 below, position 2 is the wash mode, and position 3 is the fire mode. When the **"Start Fan"** button is pushed on the control cabinet, the damper opens to the exhaust mode (position 1) to become the preliminary grease extraction baffle. There is a small sloped grease collecting gutter on the back side of the damper which drains off liquefied grease, preventing it from re-entraining into the airstream.

Baffle #2

This baffle is located on the interior back wall of the ventilator and is a stainless steel pipe, equipped with brass spray nozzles on 8" to 10" centers. (Refer to Figure 1) During the wash cycle, hot detergent water is released through the nozzles. If the ventilator's automatic fire control system is activated, fire smothering water spray is also released through the spray nozzles.

Baffle #3

This baffle is located on the back of the inspection doors. This baffle is also a grease collecting gutter, collecting grease, dust and lint extracted by the ventilator - preventing the contaminants from dropping back into the high velocity airstream.

NOTE: Some ventilators may be equipped with optional "Custom Air" baffles (shown dotted) which reduces the exhaust volume where the baffle occurs.

NOTE: Some ventilators may be equipped with optional continuous cold water mist. Refer to Page 24 for details.

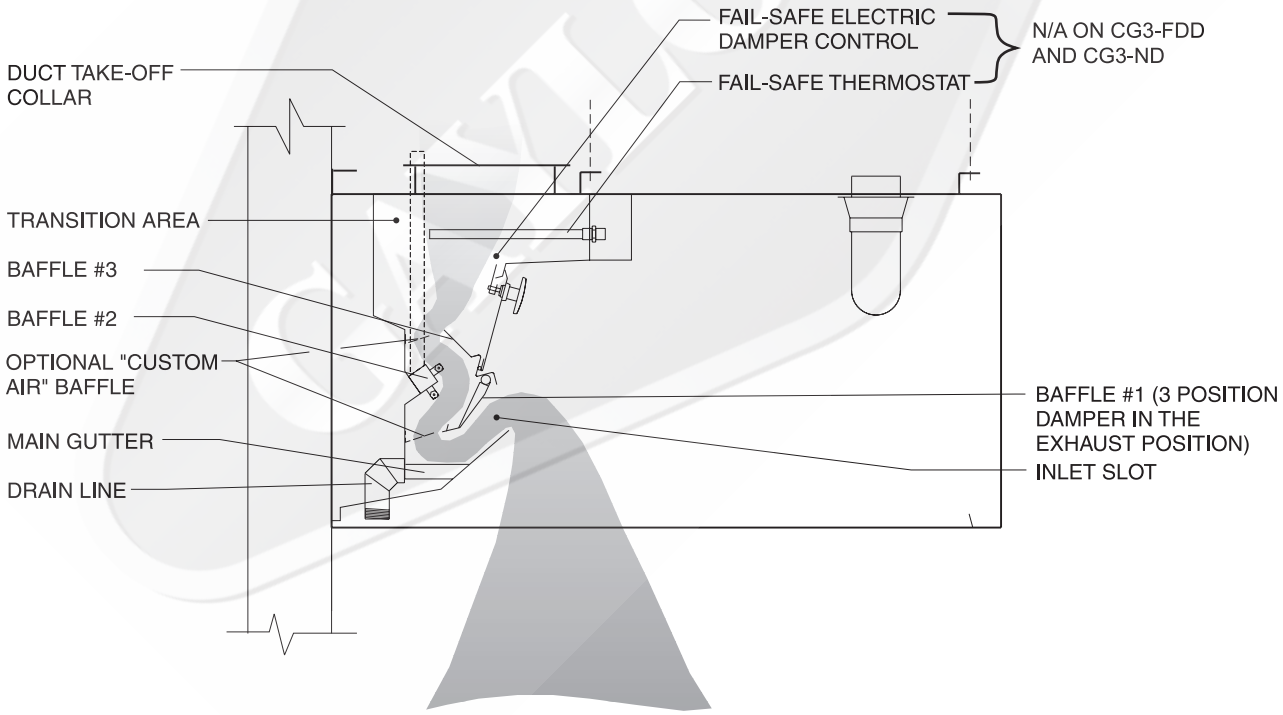


FIG. 1
GREASE EXTRACTION

WASH CYCLE

The wash cycle is activated each time the exhaust fan is shut off by pushing the **"Start Wash"** button on the Command Center or as programmed on the clock. When activated the exhaust and supply fans shut off, the damper control is energized and the damper begins closing forward to the wash position, and once closed the hot water wash sprays come on. The ventilator may be equipped with an optional second wash manifold as shown in Figure 3 and is indicated in the model number, stamped on the ventilator nameplate, by the suffix "DW". This is typically used when extra heavy duty cooking equipment is under the ventilator.

This hot detergent water washes the day's grease, dust and lint accumulation from the interior of the ventilator flushing it down to the main gutter which slopes to a pre-flushed drain which leads to the building drain system. Spray nozzles are located on 8" to 10" centers on the wash manifold mounted on the interior back wall of the ventilator. At the end of the wash cycle, the water automatically shuts off, and the interior of the ventilator is clean - ready for the next day's operations. The damper remains in the wash position until the exhaust fan is restarted. This is to prevent conditioned air from going up the exhaust system during off hours.

The length of the wash cycle may be set between 3 minutes and 9 minutes. The length of time is dependent upon the type of cooking equipment being used. Typical settings are 3 minutes for light-duty equipment, 5 minutes for medium-duty equipment, and 9 minutes for heavy-duty equipment. However, adequate cleaning is dependent upon water pressure, water temperature, daily grease accumulation, the length of the wash cycle, frequency of wash cycle and the type of detergent being used. It may be necessary to increase the wash time to achieve proper cleaning. Refer to page 15 for details on setting the wash time.

FIG. 2
VENTILATOR CONTROL CABINET
MODEL GPC-6000 SERIES

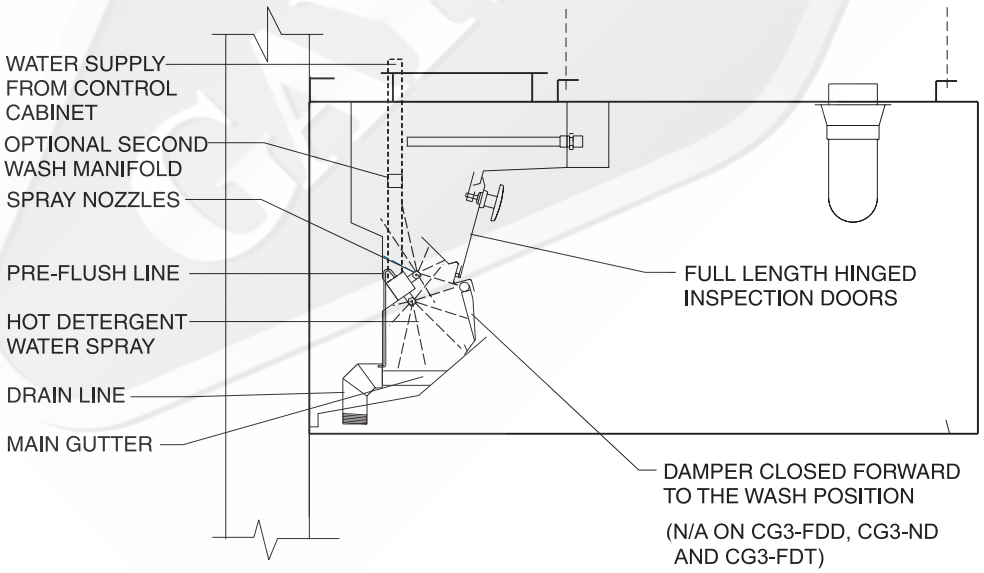


FIG. 3
WASH CYCLE

INTERNAL FIRE MODE — For CG3 and CG3-FDT only!
Automatic internal fire protection is accomplished by the action of the thermostat(s), which are located at the point where the ductwork joins the ventilator. When the temperature of the conveying airstream, which must pass over the thermostats, reaches 250°F, the system is activated, and the following occurs:

1. The damper begins closing back to the fire position, position 3 as shown in Fig.4—stopping the combustion-supporting, natural draft through the ventilator and creating a fire barrier to contain the fire in the kitchen. (N/A on CG3-FDT)
2. The exhaust fan serving the ventilator is shut off. The supply fan is also shut off.
3. Fire-smothering water spray is released into the interior of the ventilator through the spray nozzles.
4. The digital display reads "Fire In Hood, Fan Off, Wash On" for approximately 5 seconds.
5. Then the digital display reads "Fire In Hood, Damper Closing" for approximately 5 seconds.
6. Then the digital display reads "Fire In Hood, Notify Fire Department". This display stays on until the thermostat cools down below 250°F.
7. A red light on the Command Center illuminates.
8. If the Command Center is intertied with a building alarm or monitoring system, a fire signal would be sent to that system.
9. Upon cooling of the thermostat below 250ºF, the Cool Down Cycle starts. The water continues to spray during the Cool Down Cycle (2 minutes). The damper moves to the exhaust position. (N/A on CG3-FDT)
10. While in the cool down cycle the digital display reads "Cool Down Cycle, xxx sec. to end". xxx is the countdown in seconds until the wash turns off. The damper moves to the exhaust position.
11. At the end of the cool down cycle the wash turns off and the digital display reads "Fan Off 12:00 (actual time), Start Fan>F1". The damper closes to the wash position. (N/A on CG3-FDT)

NOTE: The water may be shut off prior to the end of the 2 minute cool down cycle by pushing the **"Exit"** button on the C-6000 Command Center. After the water has shut off, the damper remains in the wash position until the **"Start Fan"** button is pushed.

CAUTION:

In case of severe fire the thermostats located in the plenum will activate. As a precautionary measure, it is recommended that the thermostats be replaced.

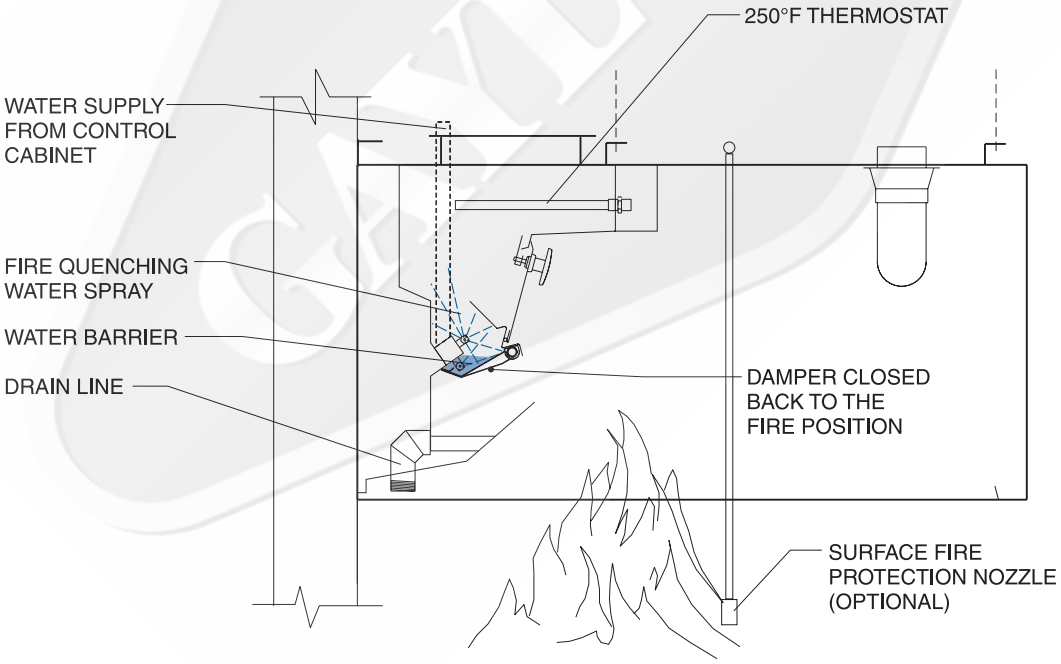


FIG. 4
FIRE CYCLE

EXTERNAL FIRE MODE

An External Fire Mode is activated by the Ventilator's Fire Suppression (Duct, Plenum, Surface/Appliance) system's microswitch or contacts and/or an optional break glass fire switch (see Figure 5). Terminals 4 & FS are used for the External Fire Mode, refer to wiring diagram for details. The break glass fire switch, if used, would normally be located at the exit of the kitchen. When the External Fire Mode is activated, the following occurs:

1. The Exhaust Fan comes on immediately if it was off to help remove smoke, heat, etc.
2. The Supply Fan shuts off immediately.
3. The digital display reads "Ext.FireActive" and alternates between "Reset FireSwitch" and "Fan On, Wash On".
4. A red light on the Command Center flashes.
5. After a 60-second delay, a fire smothering water spray is released into the interior of the ventilator through the spray nozzles. The 60-second delay allows the ventilator's fire suppression system time to put out the fire, before starting the water spray.

If the fire intensifies and the thermostat reaches 250°F, the fire damper would then close and the exhaust fan would shut off. See Internal Fire Mode.

To resume normal operations, open the fire switch and flip the toggle switch to the position marked "normal". Replace the glass rod and close the cover. Push either the **"Start Fan"** or **"Start Wash"** button.

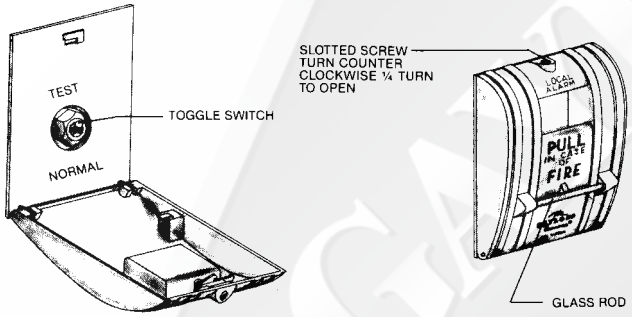


FIG. 5
BREAK GLASS FIRE SWITCH
C-1357A SERIES

INTERNAL & EXTERNAL FIRE MODES AT THE SAME TIME

It is possible that both the Internal and External Fire modes can be activated at the same time. If this occurs, the Internal Fire Mode will override the External Fire mode until the thermostat(s) cool below 250°F. At this point the Cool Down Cycle will start counting down for 2 minutes. After the Cool Down Cycle, the External Fire mode will start.

Special Note: If the control is in the Cool Down Cycle when the External Fire mode is activated, the Cool Down Cycle will finish counting down for 2 minutes, before switching to the External Fire Mode.

Summary of Both Fire Modes at the Same Time

1. Internal Fire Mode (until thermostat temperature drops below 250°F)
2. Cool Down Cycle (for 2 minutes)
3. External Fire Mode (until the External Fire Switch is reset)

TESTING INTERNAL FIRE MODE – FOR CG3 AND CG3-FDT ONLY!

The internal fire protection system may be tested periodically by pushing and holding for 20 seconds, the **"Fire Test Switch"** located inside the electrical compartment of the control cabinet. Pushing this switch duplicates thermostatic action. *CAUTION: Before pushing the **"Fire Test Switch"**, check to see if the internal fire protection system is tied to the building alarm system.*

TO RESUME NORMAL OPERATION

1. To discontinue the 2 minute cool down cycle at any point during the cycle, push the **"Exit"** F5 button on the C-6000 Command Center.
2. Push the **"Start Fan"** F1 button on the Command Center.

SURFACE FIRE PROTECTION

The National Fire Protection Association, NFPA-96 document requires fire extinguishing equipment over all grease producing cooking equipment such as griddles, ranges, fryers, broilers, and woks. In addition, the system must protect the interior of the ventilator and the exhaust duct.

The most common fire system is either a wet chemical type or the Gaylord Quencher water spray system. In the event of a fire this system would normally be activated and discharged prior to the ventilator's internal fire protection. If the fire is unusually severe or the surface fire protection system malfunctions, the ventilator's internal fire protection system would activate, thus providing a second level of defense. These systems may be intertied with the ventilator control cabinet to activate the External Fire Mode.

FIRE MODE SUMMARY:

Note: The Damper Position does not apply to CG3-FDL, CG3-FDD, or CG3-ND

	INTERNAL FIRE	COOL DOWN CYCLE (for Internal Fire Mode only!)	EXTERNAL FIRE
Exhaust Fan	OFF	OFF	ON
Supply Fan	OFF	OFF	OFF
Damper Position	FIRE	EXHAUST	EXHAUST
Water Spray	ON	ON	ON

DAILY OPERATION

All functions of the ventilator, such as starting the exhaust fan, starting the wash cycle, etc., are controlled by the Command Center located on the control cabinet. Refer to Pages 14 through 17 for detailed instructions on the operation of the Command Center.

FIG. 6
VENTILATOR CONTROL CABINET
MODEL GPC-6000 SERIES

Starting the Exhaust Fan

To start the exhaust fan push the **"Start Fan"** button on the Command Center. If the Command Center is programmed to start the fan automatically, then the start button does not need to be pushed. It is important to start the exhaust fan before turning on the cooking equipment.

When the exhaust fan is activated the following occurs:

1. The damper begins opening to the exhaust position. (N/A on CG3-FDD and CG3-ND)
2. A green light on the Command Center illuminates.
3. The supply fan comes on.
4. The digital display reads "Starting Fan & Damper Opening" for approximately 5 seconds. Then the digital display reads "Starting Fan, xx Seconds to Fan On". xx is the coundown in seconds until the exhaust fan comes on.
5. After the damper fully opens (elapsed time approximately 45 seconds) the exhaust fan comes on.
6. The digital display then reads "Fan On 12:00" (current time) and "Start Wash> F2".

Stopping the Exhaust Fan and Starting the Wash Cycle

***CAUTION**: The cooking equipment must be shut off prior to shutting off the exhaust fan. Failure to do this will cause excessive heat buildup and could cause the surface fire protection system to discharge.*

To start the wash cycle push the "**Start Wash**" button on the Command Center. If the Command Center is programmed to start the wash automatically, then the start button does not need to be pushed. When the wash cycle is activated the following occurs:

1. The exhaust and supply fans shut off.
2. The damper begins closing forward to the wash position. (See Figure 3, page 7). This action takes approximately 45 seconds. (N/A on CG3-FDD and CG3-ND)
3. The digital display reads "Starting Wash, Damper Closing" for approximately 5 seconds, then the digital display reads "Starting Wash, Wash On in xx seconds". xx is the countdown in seconds to until the wash starts.
4. After the damper closes to the wash position, the hot, detergent injected, water sprays come on to wash away the grease collected during the days operation. The wash cycle stays on for the length of time programmed in the Command Center. The length of the wash cycle may be set between 3 minutes and 9 minutes. Typical settings are 3 minutes for light-duty equipment, 5 minutes for medium-duty equipment and 9 minutes for heavy-duty equipment. Refer to page 15 for details on setting the wash time.
5. During the wash cycle, the digital display reads "Wash On, Wash #1 xxx seconds". xxx is the coundown in seconds until the wash system shuts off.
6. Upon completion of the wash cycle, the damper stays in the closed wash position until the exhaust fan is re-started. This is to prevent conditioned air from going up the exhaust stack during off hours.(N/A on CG3-FDD and CG3-ND)
7. The digital display now reads "Fan Off 12:00" (current time) and Start Fan>F1.

After the wash cycle is completed, wipe the exposed front surface of the damper at the air inlet slot, as well as other exposed exterior surfaces. (Refer to Figure 7, Page 11).

In very heavy cooking operations it may be necessary to wash the ventilator(s) more than once a day. This can be done manually by pushing the **"Start Wash"** button

NOTE: For proper operation of the wash system there must be adequate water pressure and temperature. There is a pressure/temperature gauge inside the control cabinet.

Water Pressure 40 psi min. - 80 psi max.

Water temperature 140°F min. - 180°F max.

NOTE: Some control cabinets are equipped with a low detergent switch. If so equipped, the green light will flash if the detergent tank is empty or if the detergent pump is malfunctioning and detergent is not pumping. The digital display reads "Low Detergent" and the text alternates from "Fill Tank" and "Check Pump". If the detergent tank is filled with water the detergent switch will activate as if there is no detergent.

NOTE: The ventilator wash system is designed to remove daily accumulations of grease within the extraction chamber. If the ventilator is not washed a minimum of once during a cooking day, a grease buildup could accumulate which the wash system cannot remove. If this occurs, it is recommended that the ventilator be put through several wash cycles by pushing the **"Start Wash"** button on the Command Center. If this does not remove the grease, it will be necessary to remove the grease manually by using a scraping tool, such as a putty knife, or retain the services of a commercial hood cleaning service to steam clean or pressure wash the system.

WARNING: Some commercial hood cleaning services blow a fire retardant chemical into hood and duct systems. Fire retardant chemicals should never be applied to any portion of The Gaylord Ventilator. If retardant is applied to the ventilator, it must be removed.

PREVENTIVE MAINTENANCE

The following should be checked periodically in order to keep The Gaylord Ventilator operating at design efficiency:

Weekly

1. The detergent tank should be checked at least weekly and kept full with a recommended detergent. (Refer to Page 13)

Monthly

1. The detergent system fittings should be checked at least monthly. This is an airtight system and fittings should be tight. (For complete details refer to the Detergent Pump section on Page 12.)
2. At least monthly, at the conclusion of a wash cycle, open the inspection doors of the ventilator and check to ensure that the interior has been cleaned of grease, dust, and lint. (Refer to Figure 7) If overall cleaning appears to be inadequate, refer to “Trouble-Shooting of the Wash System”, Page 27.
3. The main grease gutter of the ventilator should be checked at least monthly to remove any foreign material such as paper towels, order chits, etc.

Every Six Months

1. Exhaust fan(s) should be checked every six months for belt tightness, belt alignment, and lubrication of necessary moving parts.

   NOTE: A blue lithium based grease is best suited for high heat and speed bearing lubrication.
2. Check for proper velocity at air inlet slot. Refer to Pages 21 through 23 for method of checking velocity.
3. Test the "Internal Fire Mode" to check for proper damper closure. Refer to Page 9 for instructions.
4. Detergent tank and foot valve should be cleaned every six months.

INSPECTION AND CLEANING REQUIREMENTS

NFPA-96 (Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations) require that hoods, ducts and exhaust fans be inspected by a properly trained, qualified and certified company or person(s) in accordance with the following table.

Upon inspection, if found to be contaminated with deposits from grease-laden vapors, the entire exhaust system shall be cleaned by a properly trained, qualified, and certified company or person(s) acceptable to the authority having jurisdiction in accordance.

When a vent cleaning service is used, a certificate showing date of inspection or cleaning shall be maintained on the premises. After cleaning is completed, the vent cleaning contractor shall place or display within the kitchen area a label indicating the date cleaned and the name of the servicing company. It shall also indicate areas not cleaned.

EXHAUST SYSTEM INSPECTION SCHEDULE	
Systems serving solid fuel cooking operations	Monthly
Systems serving high-volume cooking operations such as 24-hour cooking, charbroiling or wok cooking	Quarterly
Systems serving moderate-volume cooking operations	Semi-annually
Systems serving low-volume cooking operations, such as churches, day camps, seasonal businesses, or senior centers	Annually

Factory trained service agencies are certified by Gaylord Industries, Inc. to perform these inspections. For the name and phone number of your nearest agent visit our web site at www.gaylordusa.com, email at info@gaylordusa.com, or call 1-800-547-9696.

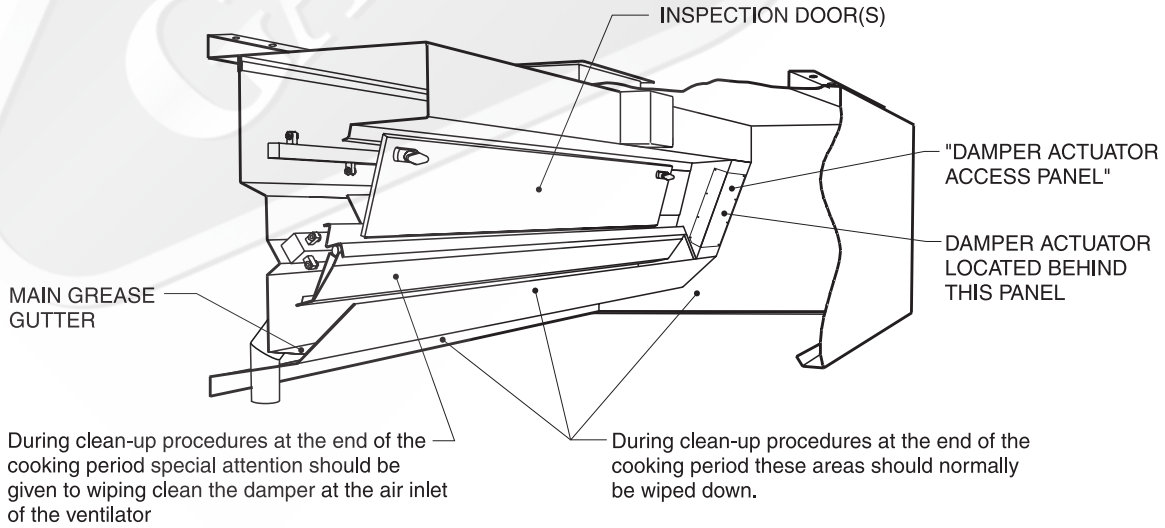

INSPECTION DOOR(S)
"DAMPER ACTUATOR ACCESS PANEL"
DAMPER ACTUATOR LOCATED BEHIND THIS PANEL
MAIN GREASE GUTTER
During clean-up procedures at the end of the cooking period special attention should be given to wiping clean the damper at the air inlet of the ventilator
During clean-up procedures at the end of the cooking period these areas should normally be wiped down.

FIG. 7

DETERGENT PUMP OPERATION

The Gaylord Ventilator detergent pump is an integral part of the wash-down system of The Gaylord Ventilator. The pump is located within the control cabinet unless otherwise specified. (Refer to schematics on Pages 33 through 35.)

OPERATION

The detergent pump is started when the wash cycle begins. The pump draws detergent up from the detergent tank, pushing it through the copper tubing and into the hot water line serving the ventilator.

NOTE: Some control cabinets are equipped with a low detergent switch. If so equipped, the green light will flash if the detergent tank is empty or if the detergent pump is malfunctioning and detergent is not pumping. The digital display reads "Low Detergent" and the text alternates from "Fill Tank" and "Check Pump". If the detergent tank is filled with water the detergent switch will activate as if there is no detergent.

Initial Operation

To prime and operate the pump for the first time, it is recommended that water be used instead of detergent to prevent detergent from spilling in case of leaks at the system's fittings.

Priming The Pump

The detergent pump is self-priming. Push the pump test switch, located on the junction box of the motor, and hold down until liquid climbs up the vinyl tubing and fills the pump head. The pump will be operating properly when both upper and lower poppet checks can be seen moving up and down slightly. If the pump does not self-prime, an air lock may have developed within the pump head and the following action should be taken:

1. Hold down pump test switch and loosen top cap slightly to allow air to be pushed out. Repeat as necessary until liquid climbs up tube and fills pump head.

   Note: Do not overly tighten cap or damage to the pump head will occur.

2. If the pump still does not work properly, check the following:

   A. Foot valve should be clean and immersed in the liquid.

   B. Check all fittings to ensure an airtight system.

   C. Poppet checks within the foot valve, pump head and brass check valve should be clean and operating freely.

   D. Detergent lines should be free and clear.

DETERGENT FLOW

Detergent flow is initially factory set according to the pipe size of the control cabinet (refer to chart). Generally, the factory setting will be sufficient to provide adequate cleaning of the ventilator. However, adequate cleaning is dependent upon a number of factors:

1. Temperature of hot water
2. Water pressure
3. Daily grease accumulation
4. Wash cycle time
5. Frequency of wash cycle
6. Type of detergent

Depending upon these factors, it may be necessary to adjust the detergent flow. Adjustment may be accomplished by changing the cam to a different size. To change the cam:

1. Loosen Allen set screw on brass cam.
2. Remove cam and replace with next size as required.
3. Cam #1 minimum setting. Cam #4 maximum setting.

NOTE: Cams are available from Gaylord Industries or your Gaylord Certified Service Agency.

PREVENTIVE MAINTENANCE

As with any piece of fine equipment, a reasonable amount of care must be taken to keep it in good working order:

1. Caution should be taken not to spill detergent on the exterior of the pump.
2. A periodic check should be made of all fittings to guarantee their tightness.

NOTE: The detergent pump motor has sealed bearings and will not require lubrication.

DETERGENT CONSUMPTION CHART
(Imperial)

Control Cabinet Pipe Size	Factory Cam Setting	Oz. Per Min. at 40 PSI Water Pressure	WASH CYCLE LENGTH					
			3 Minutes		5 Minutes		9 Minutes	
			Oz. Per Day	Gal. Per Mo.	Oz. Per Day	Gal. Per Mo.	Oz. Per Day	Gal. Per Mo.
1/2"	#1	3.2	9.6	2.1	16.1	3.5	22.5	4.9
3/4"	#2	5.1	15.6	3.4	26.1	5.7	36.5	7.9
1"	#3	6.0	17.8	3.9	29.6	6.5	41.4	9.1
1 1/4" & 1 1/2"	#4	6.3	18.8	4.1	31.3	6.8	43.8	9.6

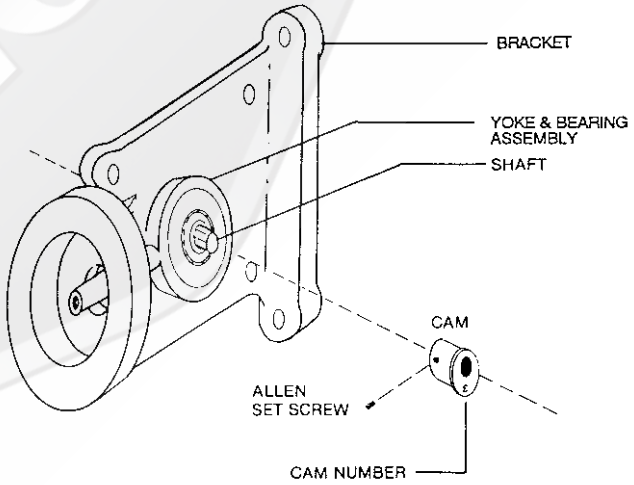


FIG. 8

DETERGENT FOR THE WASH SYSTEM

FORMULA G-510 is the only cleaner recommended by Gaylord Industries for use in the washdown system of The Gaylord Ventilator. FORMULA G-510 is a concentrated colloid cleaner specially formulated to remove the daily accumulation of grease inside The Gaylord Ventilator without damaging the rubber and synthetic parts of the detergent pumping system. FORMULA G-510 is biodegradable, safe for kitchen personnel, and has a variety of uses.

DILUTION OF FORMULA G-510 FOR VENTILATOR CLEANING

Normal Cleaning

For ventilators covering cooking equipment such as broilers, griddles, fryers, or any other heavy grease producing equipment, fill the detergent tank with full strength FORMULA G-510.

Light-Duty Cleaning

For ventilators covering light grease producing equipment such as ovens, kettles, steamers and ranges, fill the detergent tank with a mixture of one part FORMULA G-510 to one part water.

Cleaning the Ventilator Exterior

Mix one part FORMULA G-510 to twenty parts water in hand spray bottle. Spray on and wipe off. **NOTE:** Once a day, this same solution should be used to clean the front of the fire damper and main grease extracting baffle.

FOR OTHER CLEANING JOBS

The colloidal action of FORMULA G-510 makes it a cleaner especially well-suited for use in kitchens. The colloids break up dirt and grease into millions of tiny particles that constantly repel each other. These particles cannot recombine or redeposit on a surface and are, therefore, easily washed away. FORMULA G-510 is biodegradable and contains no harsh chemicals, yet offers outstanding performance on the toughest cleaning jobs.

Use a mixture of one part FORMULA G-510 to twenty parts water for:

VINYL/PLASTIC/WALLS...Removes dirt, grease, food deposits and fingerprints.
REFRIGERATORS...Removes dirt, spilled milk, blood, mildew and objectionable odors.
RESTROOMS...Add a disinfectant to clean all fixtures, walls, floors, etc.

Use a mixture of one part FORMULA G-510 to five parts water for extremely heavy grease build-up, such as on the floor and on equipment around deep-fryers. Spray on and rinse or wipe off. For extremely soiled areas, gentle agitation, followed by a soaking period, will result in more thorough cleaning.

DON'T be afraid to experiment with FORMULA G-510 because it contains no phosphates, nitrates, enzymes, sulfates, sulfonates or silicates.

LIMITED WARRANTY

G-510 CHEMICAL DIVISION warrants that FORMULA G-510 will not cause cleansing agent damage to the rubber and synthetic parts of the injection pump ("O" rings, diaphragms, washers, tubing, and other such parts) used with The Gaylord Ventilator, Heat Reclaim Unit, or Pollution Control Equipment. G-510 CHEMICAL DIVISION'S obligation under this warranty and any warranties implied by law shall be limited to repairing or replacing, at its option, any of said parts which G-510 CHEMICAL DIVISION'S examination shall disclose to its satisfaction to have been damaged by the use of FORMULA G-510 for the life of the detergent pumping system. This warranty shall not cover damages caused by any other detergent. The use of any other detergent shall void this warranty.

All repairs and replacement parts under this warranty shall be F.O.B. G-510 CHEMICAL DIVISION'S factory. The owner shall pay the necessary freight and delivery charges; also removal and installation costs. Any federal, state or local taxes are also extra. Requests for repairs or replacement parts should be made to 20/10 Products Inc., PO Box 7609, Salem, OR 97303.

This is the sole warranty with respect to FORMULA G-510. G-510 CHEMICAL DIVISION MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATION ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT. G-510 CHEMICAL DIVISION SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THIS WARRANTY.

IMPORTANT

If a cleansing agent other than FORMULA G-510 is used with The Gaylord Ventilator injection pump, it is recommended that a warranty similar to the above be obtained from the manufacturer of said product.

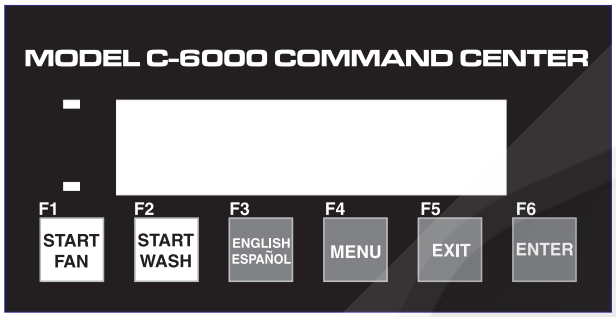
For name and address of the nearest FORMULA G-510 distributor contact:

20/10 Products Inc.
P.O. Box 7609
Salem, OR 97303
Phone: 800-286-2010
FAX: 503-363-4296
E-Mail: twentyten@juno.com

General Description:
The C-6000 Command Center is designed to start and stop the exhaust fan and wash up to 5 groups of ventilators in sequence with a delay period between each group. A sequence wash may be necessary if the building's hot water system is not capable of supplying the required volume of water at one given time.

The exhaust fan and wash sequence may be started **Manually** by pushing the "**Start Fan**" or "**Start Wash**" buttons, or may be programmed for **Automatic** operation.

Programmed operations may include:
1. Starting the exhaust fan once within a 24-hour period.
2. Stopping the exhaust fan and starting the wash cycle sequence once within a 24-hour period



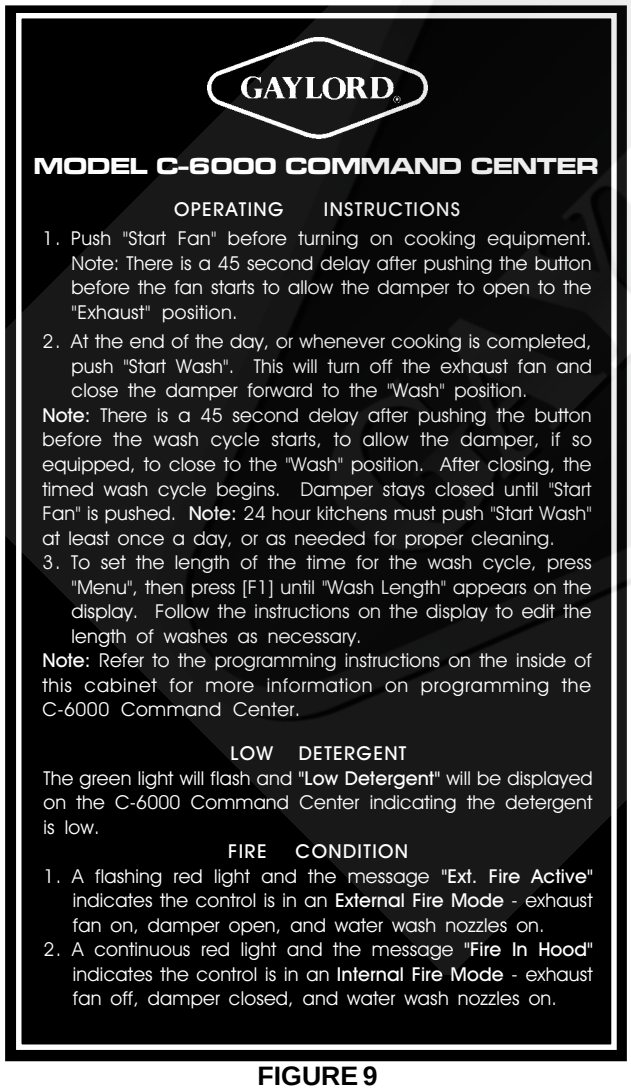

GAYLORD
MODEL C-6000 COMMAND CENTER
OPERATING INSTRUCTIONS
1. Push "Start Fan" before turning on cooking equipment. Note: There is a 45 second delay after pushing the button before the fan starts to allow the damper to open to the "Exhaust" position.
2. At the end of the day, or whenever cooking is completed, push "Start Wash". This will turn off the exhaust fan and close the damper forward to the "Wash" position.
Note: There is a 45 second delay after pushing the button before the wash cycle starts, to allow the damper, if so equipped, to close to the "Wash" position. After closing, the timed wash cycle begins. Damper stays closed until "Start Fan" is pushed. Note: 24 hour kitchens must push "Start Wash" at least once a day, or as needed for proper cleaning.
3. To set the length of the time for the wash cycle, press "Menu", then press [F1] until "Wash Length" appears on the display. Follow the instructions on the display to edit the length of washes as necessary.
Note: Refer to the programming instructions on the inside of this cabinet for more information on programming the C-6000 Command Center.
LOW DETERGENT
The green light will flash and "Low Detergent" will be displayed on the C-6000 Command Center indicating the detergent is low.
FIRE CONDITION
1. A flashing red light and the message "Ext. Fire Active" indicates the control is in an External Fire Mode - exhaust fan on, damper open, and water wash nozzles on.
2. A continuous red light and the message "Fire In Hood" indicates the control is in an Internal Fire Mode - exhaust fan off, damper closed, and water wash nozzles on.

FIGURE 9
C-6000 COMMAND CENTER

3. Programming the length of the wash cycles and delay periods between the wash cycles. The maximum length of a wash cycle is 9 minutes. The maximum length of the delay period is 99 minutes.
4. Skipping a day so the exhaust fan and wash cycle do not operate for holidays or specific days within a 7-day week when the kitchen is not operating.

The C-6000 Command Center provides information and programming for various functions by accessing nine different menu catagories. An overview of the nine menu items are as follows:

1. **Service** - Displays Gaylord's website address: gaylordusa.com
2. **Detergent** - Displays Toll-Free Number to order detergent: 800-286-2010
3. **Wash Length** - Sets length of each wash cycle from 3 to 9 minutes
4. **Delay Time** (for sequence wash units only) - Sets delay between washes from 1 minute to 99 minutes
5. **Set Clock** - Day, hour and minutes
6. **AutoMode [M or A]** - Sets the C-6000 to Manual or Automatic modes. In Automatic mode, the C-6000 will start the Fan and Wash at the preset times that were set using the Set Wash Times option.

   A = Automatic / M = Manual

   Also allows individual days (Mon, Tues., etc.) to be set ON or OFF when Automatic mode is selected.
7. **Set Wash Times** - Sets Start Times for Automatic start of Fan and wash when C-6000 is set to Automatic mode.
8. **Wash Test** - Runs through a complete Wash Cycle with decresed times

   Damper Closing Time = 10 sec.
   Wash Times = 10 sec.
   Water Heating Time = 10 sec.
   Exits menu when finished.
9. **Number of Washes** - Preset at factory and protected with a password. Allows the number of washes to be changed from 1 to 5 (S1 to S5).

Spanish (Español) Instructions:
The C-6000 Command Center has the ability to display its commands and messages in either English or Spanish (Español).

Press the **"ENGLISH / ESPAÑOL"** [F3] button to toggle the language displayed from English to Spanish (Español) or from Spanish (Español) to English.

NOTE: All messages displayed by pressing the **"MENU"** [F4]button only appear in English. They will not appear in Spanish (Español).

Using the Menu:
To Enter the Menu, press the **MENU** button [F4].

To navigate the Menu:

- Press [F1] to go to the Next menu item
- Press [F2] to go to the Previous menu item

- Press [F5], the **EXIT** button to exit the Menu
- Press [F6], the **ENTER** button to select a Menu item

1. Service
- Press [F6] [**ENTER**] to display Gaylord's web site address: gaylordusa.com
- Press [F5] [**EXIT**] to return to the menu

2. Detergent
- Press [F6] [**ENTER**] to display the Phone Number to order Detergent: 800-286-2010
- Press [F5] [**EXIT**] to return to the menu

3. Wash Length
- Press [F6] [**ENTER**] to display the Length of Wash #1
- Press [F3] to Increase the Wash Time up to 9 Minutes (Maximum)
- Press [F4] to Decrease the Wash Time down to 3 Minutes (Minimum)
- Press [F1] to adjust the Length of Wash #2 (if applicable)
- Press [F5] [**EXIT**] to return to the menu
- Note: Press [F1] to advance through all washes (ex.) "-S2" has 2 washes)

4. Delay Time
- Press [F6] [**ENTER**] to display the Delay Time between washes (Not used if there is only one wash)
- Press [F3] to Increase the Delay Time up to 99 Minutes (Maximum)
- Press [F4] to Decrease the Delay Time down to 1 Minute (Minimum)
- Press [F5] [**EXIT**] to return to the menu

5. Set Clock
- Press [F6] [**ENTER**] to display the current Day of the Week (1=Sunday)
- Press [F3] to change to the next Day of the Week (1=Sun, 2=Mon, 3=Tues, etc.), keep pressing [F3] to cycle around if necessary
- Press [F1] to go to the current Hour
- Press [F3] to increase the Hour, keep pressing [F3] to cycle around if necessary
- Press [F1] to go to the current Minute
- Press [F3] to increase the Minute, keep pressing [F3] to cycle around if necessary
- Press [F5] [**EXIT**] to return to the menu

6. AutoMode [A or M]
- Used to select [M]anual or [A]utomatic mode. If [A] is displayed, the C-6000 is set to operate in Automatic mode. If [M] is displayed, the C-6000 is set to operate in Manual mode.
- Press [F6] [**ENTER**] to display the "Set Mode" screen
- Press [F6] [**ENTER**] again to toggle between [M]anual or [A]utomatic mode

Setting Which Days of the Week to Run:
- Press [F1] to select which days to run the C-6000 in Automatic mode
- "Sun ON" or "Sun OFF" will display
- Press [F3] to set a day to "ON". Set a day to "ON" in order for the C-6000 to run on that day
- Press [F4] to set a day to "OFF". Set a day to "OFF" in order for the C-6000 NOT to run on that day
- Press [F1] to cycle through each day of the week [Sun – Sat.]
- Press [F5] [**EXIT**] to return to the menu

7. Set WashTimes
- Only used when C-6000 is set to Automatic mode
- Press [F6] [**ENTER**] to display the Start time for the Fan on Sunday (**Sun. Fan**)
- Press [F3] to increase the Hour
- Press [F4] to increase the Minutes
- Press [F1] to go to the Start time for the Wash on Sunday (**Sun.Wash**)
- Set the time, using the same method described above
- Press [F1] to cycle through for each day of the week, for the Start Times for the Fan and Wash
- Press [F5] [**EXIT**] to return to the menu

8. Wash Test
- Press [F6] [**ENTER**] to run the C-6000 through a complete Wash cycle with decreased times
- After the Wash Test is complete, the C-6000 will return to the Fan Off mode

9. Number of Washes
- Pressing [F6] [**ENTER**] will prompt for a password It is not necessary to change this value. It is preset at the Factory.

TIME CLOCK OPERATION

AutoMode is used to have C-6000 start the exhaust/supply fans automatically, once per day. The AutoMode also stops the fans and starts the wash cycle, once per day.

To use the AutoMode:

1. Set Wash Length(s) (Menu item #3)

   Set length of each wash cycle, from 3 minutes to 9 minutes

2. Set Delay Time between washes, if control has more than one wash solenoid (Menu item #4)

   Set amount of time to wait between washes, from 1 minute to 99 minutes

3. Set Clock (Menu item #5)

   Please note that the clock is a 24-hour clock.
   Example: 1:00 PM = 13:00

   Set the current day of the week.
   Example: 1 = Sun. 2 = Mon. 3 = Tues, etc.

4. Turn AutoMode ON (Menu item #6)

   Pressing (F6) Enter will toggle between [A]utomatic and [M]anual modes

   After it is set to [A]utomatic mode, set which days of the week the Exhaust/Supply Fan will run - setting a day to "ON" means the Exhaust/Supply Fan will start on that day, and the Wash will run.

   Example: Sun ON
   Mon OFF
   Tues ON

5. Set Wash Times, set start times for Fans & Wash (Menu item #7).

   Set the time for the Fans to Start for each day of the week.

Example:	Sun. Fan	5:00
	Mon.Fan	5:00

   Set the time for the Wash to Start for each day of the week.

Example:	Sun.Wash	22:00
	Mon.Wash	22:00

MODEL C-6000 SERIES MENU FUNCTIONS

MENU FUNCTION	DISPLAY READS
1. Service - To obtain website address for a list of service agencies Press [F1] until "(1) Service" appears.	(1) Service F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] [**ENTER**] to display Gaylord's web site address: gaylordusa.com	For Service: gaylordusa.com (Toggles with) F5>Exit
Press [F5] [**EXIT**] to return to the menu	
2. Detergent - To obtain phone number of G-510 Press [F1] until "(2) Detergent" appears	(2) Detergent F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Phone Number to order Detergent: 1-800-286-2010	For Detergent: 1-800-286-2010 (Toggles with) F5>Exit
Press [F5] **[EXIT]** to return to the menu	
3. To Set Wash Length Press [F1] until "(3) Wash Length" appears	(3) Wash Length F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Length of Wash #1	Wash1 Time: 3MIN (Range from 3 Min. to 9 Min.)
Press [F3] to Increase the Wash Time up to 9 Minutes (Maximum) or Press [F4] to Decrease the Wash Time down to 3 Minutes (Minimum)	F3>Up F4>Down (Toggles with) F1>Next F5>Exit * Pressing F1>Next goes to Next Wash #2, etc. if control is set up as a Sequential control
Press [F1] to adjust the Length of Wash #2 (if applicable)	
Press [F5] **[EXIT]** to return to the menu	
4. To Set Delay Time Press [F1] until "(4) Delay Time" appears	(4) Delay Time F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Delay Time between washes (Not used if there is only one wash)	Delay Time: 1Min (Range from 1 Min. to 99 Min.)
Press [F3] to Increase the Delay Time up to 99 Minutes (Maximum or Press [F4] to Decrease the Delay Time down to 1 Minute (Minimum)	F3>Up F4>Down (Toggles with) F5>Exit
Press [F5] **[EXIT]** to return to the menu	
5. To Set Clock Press [F1] until "(5)Set Clock" appears	(5) Set Clock F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the current Day of the Week (1=Sunday)	Day 6 1=Sunday F3>Up F5>Exit (Toggles with) F1>Next F2>Prev
Press [F3] to change to the next Day of the Week (1=Sun, 2=Mon, 3=Tues, etc.), keep pressing [F3] to cycle around if necessary	
Press [F1] to go to the current Hour	Hour: 7
Press [F3] to increase the Hour, keep pressing [F3] to cycle around if necessary	F3>Up F5>Exit (Toggles with) F1>Next F2>Prev
Press [F5] **[EXIT]** to return to the menu	

MODEL C-6000 SERIES MENU FUNCTIONS

MENU FUNCTION	DISPLAY READS
6. AutoMode [A or M] - Used to select [M]anual or [A]utomatic mode. If [A] is displayed, the C-6000 is set to operate in Automatic mode. If [M] is displayed, the C-6000 is set to operate in Manual mode. Press [F1] until "(6) Auto Mode" appears	(6) AutoMode [M] F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the “Set Mode” screen	Set Mode [M] (Can be either "M" for Manual or "A" for Automatic)
Press [F6] **[ENTER]** again to toggle between [M]anual or [A]utomatic mode	F6>[A]uto/[M]an (Toggles with) F1>Next F5>Exit
Setting which day of the week to run	
Press [F1] to select which days to run the C-6000 in Automatic mode “Sun ON” or “Sun OFF” will display	
Press [F3] to set a day to “ON”. Set a day to “ON” in order for the C-6000 to run on that day Press [F4] to set a day to “OFF”. Set a day to “OFF” in order for the C-6000 NOT to run on that day	
Press [F1] to cycle through each day of the week [Sun – Sat.]	
Press [F5] **[EXIT]** to return to the menu	
7. Set Wash Times - Used only when C-6000 is set to Automatic mode. Press [F1] until "(7) Set Wash Time" appears	(7) SetWashTimes F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to display the Start time for the Fan on Sunday **(Sun. Fan**)	Sun. Fan [14:24]
Press [F3] to increase the Hour Press [F4] to increase the Minutes	F3>Hour F4>Min. (Toggles with) F1>Next F5>Exit
Press [F1] to go to the Start time for the Wash on Sunday **(Sun.Wash**) Set the time, using the same method described above	Sun.Wash [14:24]
Press [F1] to cycle through for each day of the week, for the Start Times for the Fan and Wash	F3>Hour F4>Min. (Toggles with) F1>Next F5>Exit * Pressing **F1>Next** - goes to Next Start Fan time, etc
Press [F5] **[EXIT]** to return to the menu	
8. Wash Test Press [F1] until "(8) Wash Test" appears	(8) Wash Test F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F6] **[ENTER]** to run the C-6000 through a complete Wash cycle with decreased times	* Pressing **F6>Enter** - Starts the Wash Test
9. Set Number of Washes Press [F1] until "(9) # of Washes" appears	(9) # of Washes F1>Next F2>Prev (Toggles with) F5>Exit F6>Enter
Press [F5] **[EXIT]** to return to the menu	

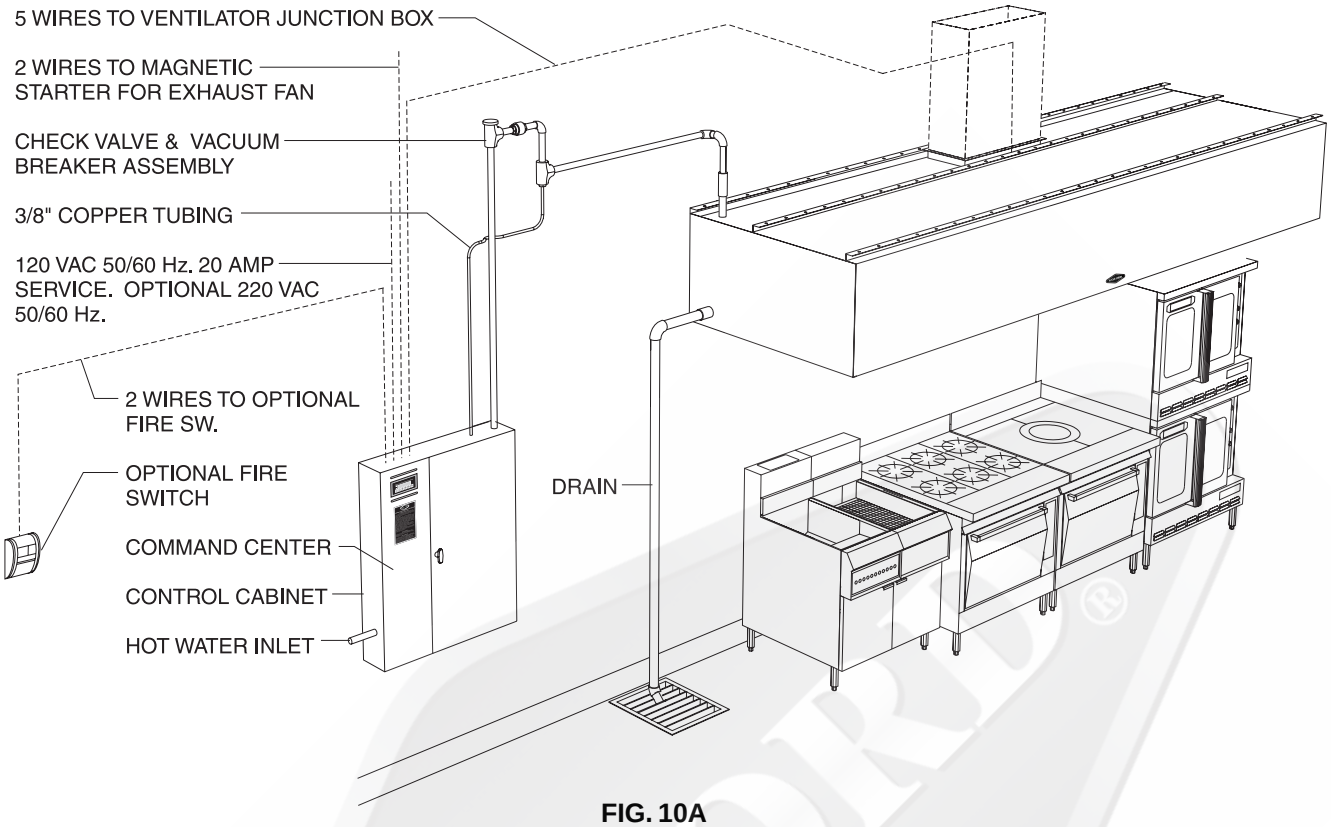

5 WIRES TO VENTILATOR JUNCTION BOX
2 WIRES TO MAGNETIC STARTER FOR EXHAUST FAN
CHECK VALVE & VACUUM BREAKER ASSEMBLY
3/8" COPPER TUBING
120 VAC 50/60 Hz. 20 AMP SERVICE. OPTIONAL 220 VAC 50/60 Hz.
2 WIRES TO OPTIONAL FIRE SW.
OPTIONAL FIRE SWITCH
COMMAND CENTER
CONTROL CABINET
HOT WATER INLET
DRAIN

FIG. 10A
TYPICAL ARRANGEMENT WITH VACUUM BREAKER/CHECK VALVE FOR BACKFLOW PREVENTION

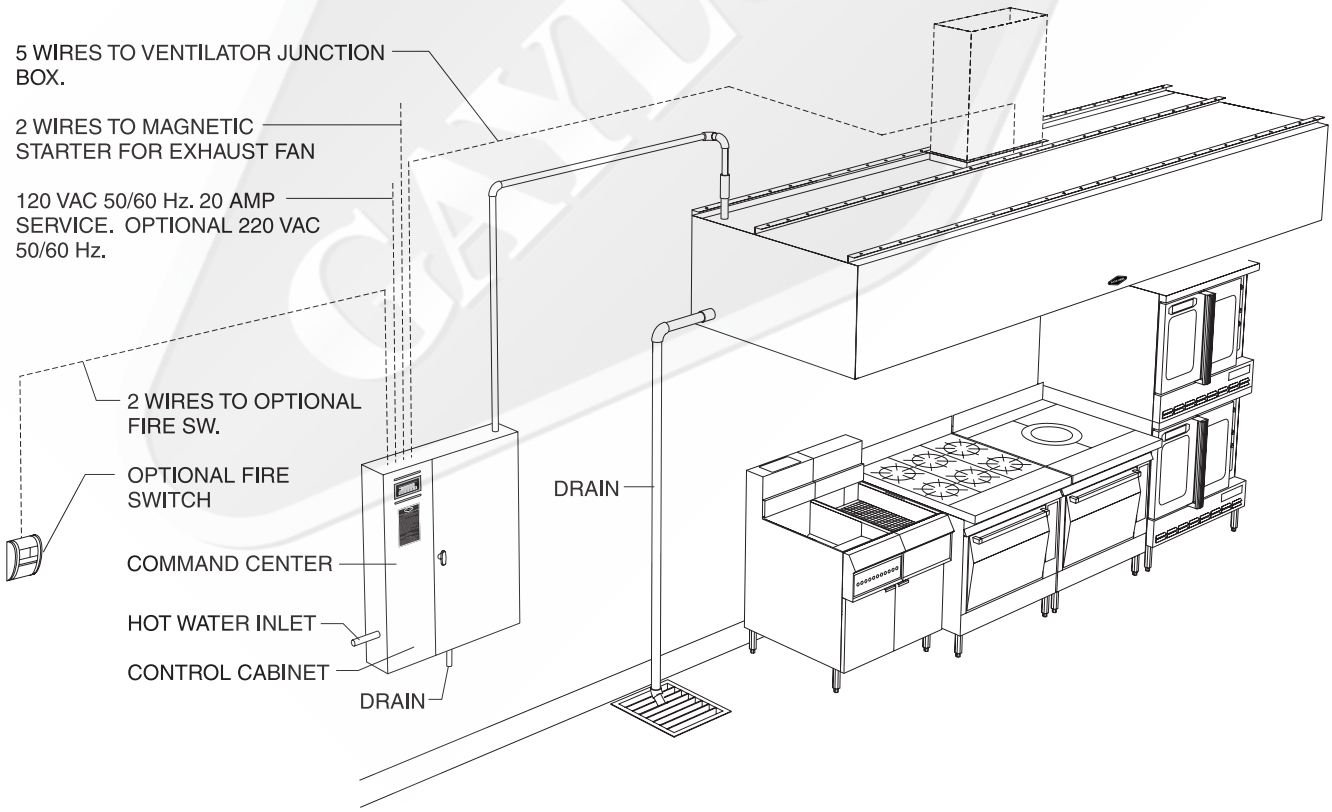

5 WIRES TO VENTILATOR JUNCTION BOX.
2 WIRES TO MAGNETIC STARTER FOR EXHAUST FAN
120 VAC 50/60 Hz. 20 AMP SERVICE. OPTIONAL 220 VAC 50/60 Hz.
2 WIRES TO OPTIONAL FIRE SW.
OPTIONAL FIRE SWITCH
COMMAND CENTER
HOT WATER INLET
CONTROL CABINET
DRAIN
DRAIN

FIG. 10B
TYPICAL ARRANGEMENT WITH BUILT-IN "RP" DEVICE FOR BACKFLOW PREVENTION

Each Gaylord Ventilator is engineered to properly ventilate the specific cooking operation. The exhaust air volume is engineered as a specific volume per lineal ft. of ventilator and is determined by the type of cooking equipment being ventilated. The following Air Volume Chart lists the various volumes per lineal ft. designs.

AIR VOLUME CHART (Imperial)		
	Desired CFM Per Lineal Foot	Static Pressure At Duct Collar
Model AB, BD, BDL Series	150*	1.33
	250	1.33
	285	1.65
	300	1.70
	400	1.65
	405	1.70
	450	2.00
	470	2.15
	500	2.40
Model BDL-DS Series	Total Both Slots	
	400	1.65
	500	2.15

* With Custom Air Baffles

A ventilator may be designed to operate at two different air volumes. For example, half the ventilator may operate at 150 CFM/Lin. Ft. by utilizing “Custom Air” Baffles, and the other half at 250 CFM/Lin. Ft.

Refer to “Measuring Inlet Slot Velocity” on Page 21 for instructions on how to determine the designed Air Volume/Lin. Ft.

The total exhaust volume for each ventilator is stamped on the ventilator nameplate. (Refer to Figure 13 on Page 23.)

DUCT VELOCITY
Based between 1700 FPM - 1900 FPM

WATER TEMPERATURE REQUIREMENTS
140°F Min. - 180°F Max.

HOT WATER PRESSURE REQUIREMENTS
40 PSI Min. - 80 PSI Max.
HOT WATER CONSUMPTION
Single Wash - .60 GPM/Lineal Ft. @ 40 PSI Average
.90 GPM/Lineal Ft. @ 80 PSI Average

Dual Wash - 1.14 GPM/Lineal Ft. @ 40 PSI Average
1.67 GPM/Lineal Ft. @ 80 PSI Average

The length of the wash cycle may be set between 3 minutes and 9 minutes. The length of time is dependent upon the type of cooking equipment being used. Typical settings are 3 minutes for light-duty equipment, 5 minutes for medium-duty equipment, and 9 minutes for heavy-duty equipment. However, adequate cleaning is dependent upon water pressure, water temperature, daily grease accumulation, the length of the wash cycle, frequency of wash cycle and the type of detergent being used. It may be necessary to increase the wash time to achieve proper cleaning. Refer to page 15 for details on setting the wash time.

ELECTRICAL REQUIREMENTS
Standard voltage 120 volt, 50/60 Hz. Provide 24 hour, 20 amp service.

Optional voltage 220 volt, 50/60 Hz. 220 volt. All controls are marked with their operating voltage. See pages 42 through 49.

RP DEVICE

The reduced pressure principle device (RP) is required to prevent contaminated water from backflowing upstream to potable water. The unit provided in the Gaylord control cabinet is manufactured by Watts Regulator Co.

1. **Initial Start-up** - To avoid water hammer or shock damage perform the following initial start-up procedures:
   A. Close the outlet hand valve.
   B. Open the inlet hand valve slowly, fill the valve and bleed the air through test cock number 2, 3, and 4.
   C. When the valve is filled, open the outlet hand valve slowly and fill the remaining supply system. The initial start-up procedure is now complete.

The reduced pressure principle device type backflow preventer (Refer to Figure 11A &11B) consists of two primary chambers with spring loaded check valves and a secondary chamber with a spring loaded relief valve. This device prevents backflow by opening and closing the check valves if the pressure from the inlet side to the outlet side of the device varies.

1. **Intermittent Discharge** - Intermittent discharge of water through the relief valve is fairly common and usually occurs if there is inlet pressure fluctuations of more than 3 psi and when the solenoid valve closes after a wash cycle.
2. **Continuous Discharge** - If there is continuous discharge of water out the relief valve when the ventilator is not in a wash cycle, do the following:
   A. Leave the inlet hand valve open and close the outlet hand valve. If there is still continuous discharge it indicates that foreign material is preventing the first check valve from closing. If flushing will not clear the unit, remove and clean the first check valve.
   B. If there is continuous discharge of water out of the relief valve during a wash cycle, there is foreign material preventing complete closing of the relief valve. Flushing the relief valve may correct this condi tion.

Repeat procedure if necessary. If flushing does not stop discharge with flow through the device, remove and clean relief valve.

In no case should the relief valve outlet port be plugged, closed off or restricted.

This device should be inspected occasionally for continual discharge from the relief valve, which indicates a need for maintenance. It is recommended that the RP device be inspected and tested once a year.

NOTE: Some regulations require annual inspection and testing by a company certified to perform such duties.

See Instruction Manual IS-TK-DP, obtainable from your Watts installer or distributor. For the name of your nearest installer or distributor, call Watts Regulator at (978) 688-1811.

FIGURE 11A
REDUCED PRESSURE PRINCIPLE DEVICE
BACKFLOW PREVENTER

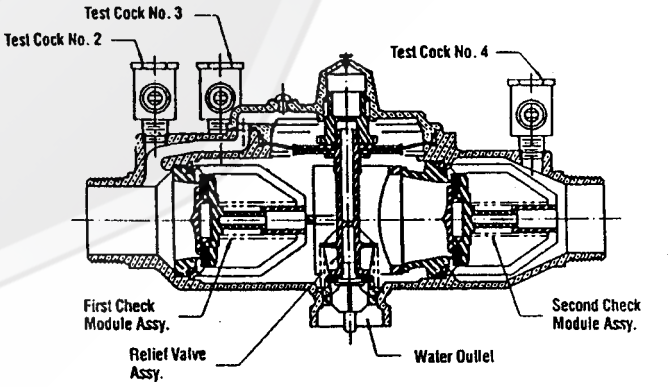


FIGURE 11B
REDUCED PRESSURE PRINCIPLE DEVICE
BACKFLOW PREVENTER

MEASURING INLET SLOT VELOCITY

Smoke capture and grease extraction efficiency are dependent upon the proper air velocity at the inlet slot of the ventilator.

The “Air Velocity Chart” below gives the optimum inlet slot velocity and the minimum and maximum allowed velocities. If the slot velocity is below or above the minimum or maximum, the exhaust fan must be adjusted accordingly.

NOTE: The height of the inlet slot can vary depending upon the design of the ventilator. It is, therefore, important to first measure the inlet slot and compare it to the chart below to determine the required average inlet slot velocity. The designed air volume per lineal foot is related to the velocity as shown on the chart below. The total air volume for the ventilator can be found on the ventilator nameplate. (Refer to Figure 13).

Air velocity readings less than what is specified on the “Air Velocity Chart” may allow smoke and grease to escape the confines of the ventilator and/or reduce grease extraction efficiency. This can result in grease deposits which lead to sanitation problems or fire hazards if left uncorrected. If the air velocity readings are higher than the maximum allowed, it will require more energy to operate the exhaust fan, excessive noise levels will result, and grease can be pulled through the extractor depositing in the duct and fan.

Higher or lower velocities than the allowed will normally put the entire heating and ventilating system out of balance.

AIR VELOCITY CHART

FOR ALL "CG3" SERIES EXCEPT "DS" SERIES

Nominal Height of Inlet Slot	Without Custom Air Baffles				With Custom Air Baffles			
	Designed CFM per Lineal Ft.	Average Inlet Slot Velocity (FPM)			Designed CFM per Lineal Ft.	Average Inlet Slot Velocity (FPM)		
		Min.	**Optimum**	Max.		Min.	**Optimum**	Max.
3"	250	1300	**1380**	1450	150	760	**800**	880
	270	1360	**1435**	1500	160	790	**830**	870
	285	1425	**1500**	1575	170	810	**855**	900
	300	1465	**1545**	1625	180	845	**880**	935
4"	400	1690	**1780**	1870	250	1040	**1095**	1150

FOR "DS" SERIES VENTILATORS*

Designed CFM Per Lineal Ft.			Required Average Inlet Slot Velocity (FPM)					
Total Both Slots	Front Slot	Rear Slot	Front Slot			Rear Slot		
			Min.	**Optimum**	Max.	Min.	**Optimum**	Max.
300	150	150	760	**800**	880	595	625	655
400	250	150	1375	**1450**	1520	595	625	655

*The nominal height of the front inlet slot on “DS” series ventilators is always 3".

MEASURING INLET SLOT VELOCITY

The standard instrument used for measuring the inlet velocities on a Gaylord Ventilator is a Pacer, Model DA40 or DA4000 Digital Anemometer. This instrument is the easiest, most accurate and the best suited for measuring ventilator inlet slot velocities. To take accurate air velocity readings, follow the instructions at right.

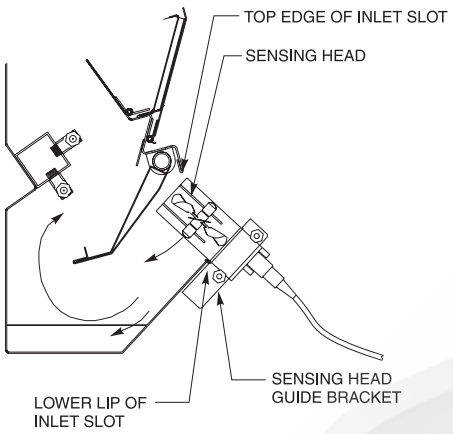


FIG. 12A

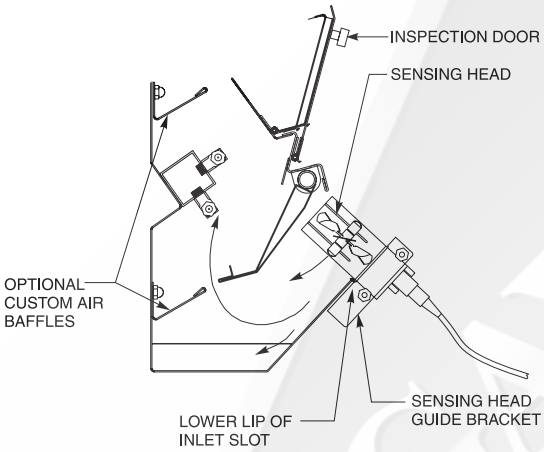


FIG. 12B

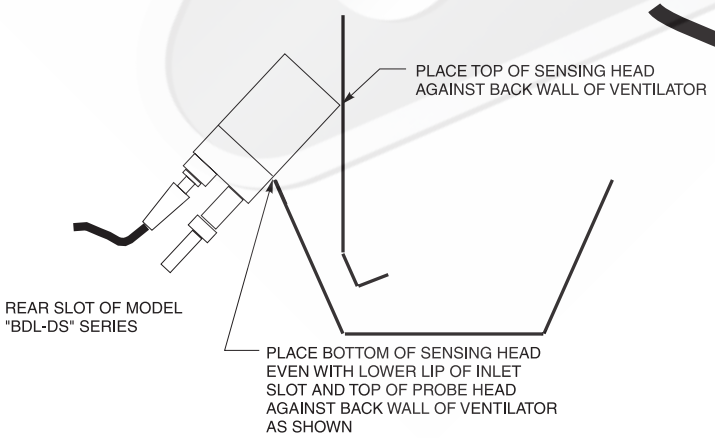

PLACE TOP OF SENSING HEAD AGAINST BACK WALL OF VENTILATOR
REAR SLOT OF MODEL "BDL-DS" SERIES
PLACE BOTTOM OF SENSING HEAD EVEN WITH LOWER LIP OF INLET SLOT AND TOP OF PROBE HEAD AGAINST BACK WALL OF VENTILATOR AS SHOWN

FIG. 12C

CROSS SECTION OF TYPICAL VENTILATOR INLET SLOTS

Instructions

1. It is first necessary to determine if the ventilator includes Custom Air baffles as shown in fig. 12B. If shop drawings are available, and if equipped, the custom baffles and their location will be noted on the front elevation. If not available, to determine if Custom Air baffles are provided, open the inspection door and look for the top custom air baffle, as shown in Fig. 12B.

2. If the ventilator includes Custom Air baffles, it will be necessary to take two sets of readings - one for the section of ventilator that includes Custom Air baffles and one where it does not.

3. Attached the sensing head guide bracket, Gaylord Part Number 18408, to the sensing head.

4. Attach the cable from the sensing head to the meter and the handle sections to the sensing head.

5. Place the sensing head guide bracket against the lower lip of the inlet slot as illustrated.

6. Using the 16 second averaging feature on the meter, slide the sensing head along the slot, back and forth, for a 3'-0" to 4'-0" distance, and record the velocity at the end of the 16 second mark. Continue this process for the full length of the ventilator.

Imortant Note: If the ventilator includes custom air baffles as illustrated in Fig. 12B, always take separate readings on the section of the ventilator that includes custom air from the section that does not have the baffles. Non custom air and custom air readings must be recorded seperately. Do not average them together.

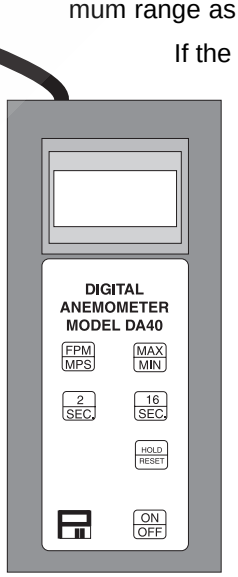
Important Note: On the rear slot of a Model BDL-DS Series, do not use the guide bracket. Refer to Figure 12C.

7. Record the velocity (fpm) on the start up inspection report form. A sample report form, which can be photocopied, is provided on page 52.

8. The designed, or optimum velocity, is noted on the shop drawings and the Air Velocity Chart on page 21. Two velocities will be noted if the ventilator includes custom air baffles.

9. Compare the recorded air velocity to the designed air velocity shown on the shop drawings or the Air Velocity Chart on page 21. The recorded velocity may be slightly lower or higher providing that it is within the minimum and maximum range as shown on the Air Velocity Chart .

If the air velocity is outside the minimum/maximum range, the performance of the ventilator will be affected and therefore the exhaust fan **must** be adjusted.



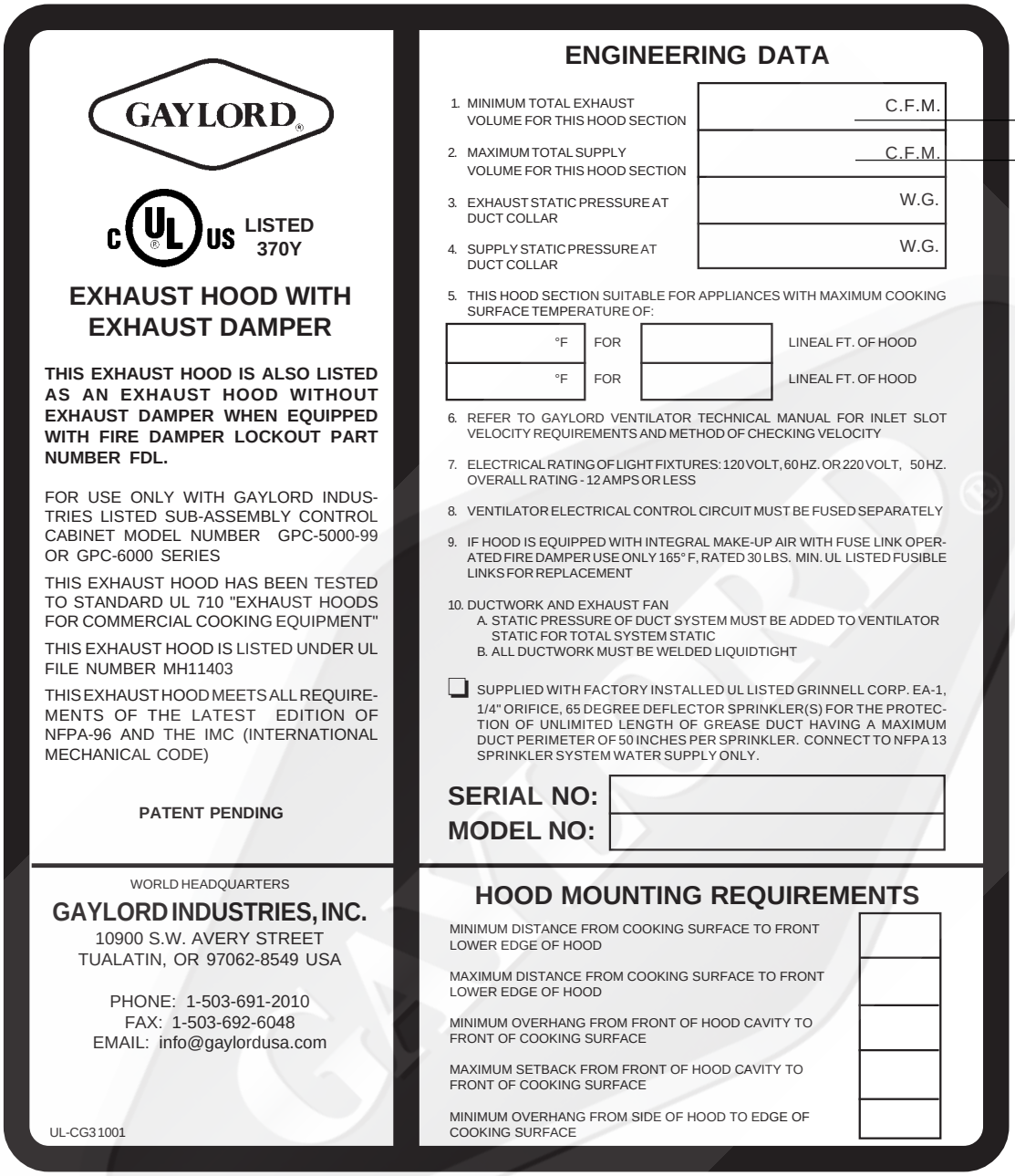

GAYLORD
c UL us LISTED 370Y
EXHAUST HOOD WITH EXHAUST DAMPER
THIS EXHAUST HOOD IS ALSO LISTED AS AN EXHAUST HOOD WITHOUT EXHAUST DAMPER WHEN EQUIPPED WITH FIRE DAMPER LOCKOUT PART NUMBER FDL.
FOR USE ONLY WITH GAYLORD INDUSTRIES LISTED SUB-ASSEMBLY CONTROL CABINET MODEL NUMBER GPC-5000-99 OR GPC-6000 SERIES
THIS EXHAUST HOOD HAS BEEN TESTED TO STANDARD UL 710 "EXHAUST HOODS FOR COMMERCIAL COOKING EQUIPMENT"
THIS EXHAUST HOOD IS LISTED UNDER UL FILE NUMBER MH11403
THIS EXHAUST HOOD MEETS ALL REQUIREMENTS OF THE LATEST EDITION OF NFPA-96 AND THE IMC (INTERNATIONAL MECHANICAL CODE)
PATENT PENDING
WORLD HEADQUARTERS
GAYLORD INDUSTRIES, INC.
10900 S.W. AVERY STREET
TUALATIN, OR 97062-8549 USA
PHONE: 1-503-691-2010
FAX: 1-503-692-6048
EMAIL: info@gaylordusa.com
UL-CG3 1001
ENGINEERING DATA
1. MINIMUM TOTAL EXHAUST VOLUME FOR THIS HOOD SECTION C.F.M.
2. MAXIMUM TOTAL SUPPLY VOLUME FOR THIS HOOD SECTION C.F.M.
3. EXHAUST STATIC PRESSURE AT DUCT COLLAR W.G.
4. SUPPLY STATIC PRESSURE AT DUCT COLLAR W.G.
5. THIS HOOD SECTION SUITABLE FOR APPLIANCES WITH MAXIMUM COOKING SURFACE TEMPERATURE OF:
°F FOR LINEAL FT. OF HOOD
°F FOR LINEAL FT. OF HOOD
6. REFER TO GAYLORD VENTILATOR TECHNICAL MANUAL FOR INLET SLOT VELOCITY REQUIREMENTS AND METHOD OF CHECKING VELOCITY
7. ELECTRICAL RATING OF LIGHT FIXTURES: 120 VOLT, 60 HZ. OR 220 VOLT, 50 HZ. OVERALL RATING - 12 AMPS OR LESS
8. VENTILATOR ELECTRICAL CONTROL CIRCUIT MUST BE FUSED SEPARATELY
9. IF HOOD IS EQUIPPED WITH INTEGRAL MAKE-UP AIR WITH FUSE LINK OPERATED FIRE DAMPER USE ONLY 165° F, RATED 30 LBS. MIN. UL LISTED FUSIBLE LINKS FOR REPLACEMENT
10. DUCTWORK AND EXHAUST FAN
A. STATIC PRESSURE OF DUCT SYSTEM MUST BE ADDED TO VENTILATOR STATIC FOR TOTAL SYSTEM STATIC
B. ALL DUCTWORK MUST BE WELDED LIQUIDTIGHT
SUPPLIED WITH FACTORY INSTALLED UL LISTED GRINNELL CORP. EA-1, 1/4" ORIFICE, 65 DEGREE DEFLECTOR SPRINKLER(S) FOR THE PROTECTION OF UNLIMITED LENGTH OF GREASE DUCT HAVING A MAXIMUM DUCT PERIMETER OF 50 INCHES PER SPRINKLER. CONNECT TO NFPA 13 SPRINKLER SYSTEM WATER SUPPLY ONLY.
SERIAL NO:
MODEL NO:
HOOD MOUNTING REQUIREMENTS
MINIMUM DISTANCE FROM COOKING SURFACE TO FRONT LOWER EDGE OF HOOD
MAXIMUM DISTANCE FROM COOKING SURFACE TO FRONT LOWER EDGE OF HOOD
MINIMUM OVERHANG FROM FRONT OF HOOD CAVITY TO FRONT OF COOKING SURFACE
MAXIMUM SETBACK FROM FRONT OF HOOD CAVITY TO FRONT OF COOKING SURFACE
MINIMUM OVERHANG FROM SIDE OF HOOD TO EDGE OF COOKING SURFACE
TOTAL EXHAUST CFM HERE
TOTAL SUPPLY CFM HERE

FIG. 13
VENTILATOR NAME PLATE

OPTIONAL CONTINUOUS COLD WATER MIST

GENERAL

Continuous cold water mist is an option on all “CG3” Series ventilators and is typically used on ventilators that cover solid fuel burning appliances such as mesquite broilers.
Continuous cold water mist ventilators incorporate a water manifold with spray nozzles, located at the lower edge of the air inlet slot. (Refer to Figure 14) When the exhaust fan is started, the solenoid valve in the cold water loop in the Gaylord control cabinet opens (refer to illustration on Page 36), turning on the mist nozzles which remain on as long as the exhaust fan is on. The nozzles produce a very find mist and are located so that the entire air stream passes through the mist. The purpose of the mist is to knock down any hot embers, produced by the solid fuel, that may be drawn up into the ventilator and to cool down the exhaust air.

ENGINEERING

1. **Pipe Size** - 1/2" cold water supply required to the control cabinet.
2. **Water Pressure** - 40 psi flow pressure. The control cabinet is equipped with an adjustable pressure regulator.
3. **Water Consumption** - .66 gph/lineal ft. of ventilator.

MAINTENANCE

Every six months check the following:

1. **Water Pressure** - Turn on the exhaust fan, opening the control cabinet door and check the water pressure gauge in the cold water loop. Water flow pressure should be at 40 psi. If it is not, adjust the pressure regulator until 40 psi is achieved.
2. **Mist Nozzles** - Turn on the exhaust fan, look into the air inlet slot and check each mist nozzle for proper spray. Remove and clean the nozzle if necessary.

TROUBLE-SHOOTING

1. If the mist nozzles do not come on when the fan is started, check the following:
   A. Open the electrical compartment of the control cabinet and check to ensure that the cold water mist override switch is in the “On” position.
   B. Check the cold water mist hand valve in the control cabinet to ensure that it is in the “Open” position.
   C. Check the cold water mist solenoid coil for voltage. Also check the coil for continuity.
   D. Foreign material in the cold water supply line may have clogged the solenoid valve and prevented its opening. If this is the case, a alight tap on the solenoid valve housing should release the valve.
2. If water mist is spraying out of the air inlet slot, check the following:
   A. With the cold water mist on, open the control cabinet and check the pressure gauge to ensure that the flow pressure is not above 40 psi. Adjust the pressure reducing valve if necessary.
   B. With the cold water mist on, check the mist nozzles for even spray. Foreign particles in the nozzle could cause an erratic mist causing it to come out the air inlet slot.

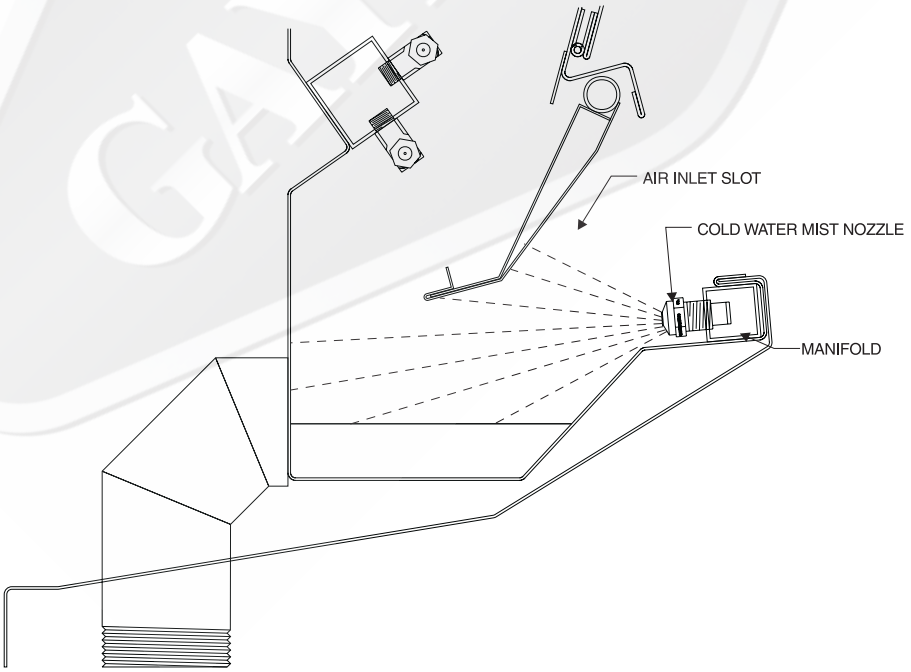
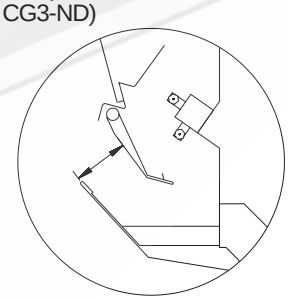


FIG. 14
CONTINUOUS COLD WATER MIST

C-6000 MODEL IDENTIFICATION

C-6000 VERSION	OUTPUT MODULE MODEL #	DESCRIPTION
6000-10	ICGL01-100	This control will drive up to 10 damper motors (10 sections of ventilator with electric damper motors). It requires a 100VA Transformer with a reset button. Bottom Terminal = **#19** Number of Fuses on Circuit Board = 4 # Damper Positioners = 1 This module does not have **GXT, CM,** or **#20** terminals on terminal strip *TB1*. It does have a **GND** (ground) terminal. It has 4 terminals on the *TB2* terminal strip on the lower portion of the board for the Damper Positioner. It is necessary to add a Relay and a terminal **GXT** for GX2 ventilators with Electric Dampers and normally closed thermostats, if required. It is necessary to add a terminal **CM** for Cold Water Mist if required, it would be tied into **#8**.
6000-10-A	ICGL01-101	This control will drive up to 10 damper motors (10 sections of ventilator with electric damper motors). It requires a 100VA Transformer with a reset button. Bottom Terminal = **GXT** Number of Fuses on Circuit Board = 4 # Damper Positioners = 1 **GXT, CM,** and **#20** terminals were added to and **GND** was removed from the *TB1* terminal strip. Relay #8 was added to accommodate **GX2** (normally closed) thermostats. It has 6 terminals on the *TB2* terminal strip on the lower portion of the board. Terminals **#5** and **#6** were added to the *TB2* terminal strip to accommodate a 2nd Damper Positioner and the Fire Test Switch. ** A Jumper is required from **#6** from the *TB2* terminal strip to **#3** on the *TB1* terminal strip.
6000-10-B	ICGL02-102	This control will drive up to 10 damper motors (10 sections of ventilator with electric damper motors). It requires a 100VA Transformer (Square D). Bottom Terminal = **GXT** Number of Fuses on Circuit Board = 6 # Damper Positioners = 0 Jumpers **J1** and **J2** were added to this board. Fuses **F5** and **F6** were added to the circuit board. Terminal **#20** was removed from this board on the *TB1* terminal strip. The terminals on *TB2* were re-labeled as **H1, H2, X1, X2, TS1,** and **TS2.** This control does NOT require a Damper Positioner.
6000-20-B	ICGL02-102	This control will drive up to 14 damper motors (14 sections of ventilator with electric damper motors). It requires a 250VA Transformer (Square D). Bottom Terminal = **GXT** Number of Fuses on Circuit Board = 6 # Damper Positioners = 0 Jumpers **J1** and **J2** were added to this board. Fuses **F5** and **F6** were added to the circuit board. Terminal **#20** was removed from this board on the *TB1* terminal strip. The terminals on *TB2* were re-labeled as **H1, H2, X1, X2, TS1,** and **TS2.** This control does NOT require a Damper Positioner.

TROUBLE-SHOOTING

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
SMOKE LOSS		
1. Smoke Loss- Ventilator is not exhausting properly.	A. Low air velocity- Average air velocity through the air entry slot should be in accordance with the Air Velocity Chart on page 21. For proper method of measuring the air velocity, refer to page 22. If the velocity is low check the following.	1. Broken or slipping belt on the exhaust fan. 2. Proper rotation of the exhaust fan wheel. 3. Proper size of exhaust fan (fan must deliver nameplate rating). 4. Ductwork inspection panel left open. 5. Damper not open or in proper position.
	B. The Gaylord Ventilator must have its own exhaust system and no other exhaust, such as dishwasher hoods, should be tied into it.	1. Inspect duct system and verify that there are no other non ventilator systems tied in. If so they must be removed.
	C. Improperly placed make-up air diffusers.	1. Make-up air directed at the ventilator will likely create cross drafts disrupting the air flow into the ventilator. Adjust the louvers to direct the make-up air away from the ventilator. 2. Make-up air should be delivered through registers at ceiling height, and distributed throughout the kitchen area. 3. Make-up air registers located near the ventilator, the louvers should be adjusted to direct the air away from the ventilator. Directing or forcing make-up air at the ventilator typically creates cross drafts resulting in smoke loss.
	D. Inadequate make-up air.	1. Make-up air must be supplied for replacement of air exhausted through all kitchen exhaust systems. 2. A general "rule of thumb" is that 75% to 80% of the replacement air should be fresh, conditioned, (heated or cooled) air brought into the kitchen area, with the remaining 20% to 25% allowed to flow into the kitchen from adjacent areas.
	E. Exhaust fan discharge.	There should be no screen over the discharge. If 1. one is found, it should be removed. The direction of discharge should not be into the 2. prevailing winds nor downward onto the roof. A vertical discharge is highly recommended.
	F. Damper not open to correct operating position. (N/A on CG3-FDD, CG3-FDT, and CG3-ND) 	Set the Damper Positioner(s) to 50 for Normal 1. operation. Measure the damper opening while in the 2. operating position. 3" Throat - Set to 2 15/16" 4" Throat - Set to 3 3/4" The damper Positioner should be set to 50, but if desired opening does not occur, decrease the Damper Positioner setting to increase the opening.
GREASE EXTRACTION		
1. Poor Grease Extraction.	A. The Gaylord "CG3" Series Ventilator extracts up to 95% of the grease, dust and lint particles from the airstream passing through it, when operated and maintained in accordance with design specifications. If it appears that the ventilator is not extracting properly, typically the exhaust volume is low.	1. Check the inlet slot velocity as described on pages 21 through 23. If the velocity is not within the required range, increase or reduce the fan speed as required.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
EXHAUST FAN		
1. When the "Start Fan" button is pushed, the green light does not come on, and the damper does not move to the exhaust position.	A. No power in the control cabinet.	1. Check the circuit breaker serving the control cabinet. The "Run" light on the "PLC" should be on at all times. If it is not on it indicates no power is getting to the control. Check all the fuses inside the control cabinet on output module, terminal blocks, and transformer.
	B. The control is in an Internal Fire Mode.	1. Check for continuity between #**15** and **GXT**. If there is no continuity between **#15** and **GXT**, refer to FIRE CYCLE in the TROUBLE -SHOOTING section.
2. If when the "Start Fan" button is pushed, the green light comes on and the damper moves to the exhaust postion but the exhaust fan does not come on.	A. Overload protector on magnetic starter tripped.	1. Push the "Reset" button on the magnetic starter and the push the "Start Fan" button on the command center.
	B. If an HOA (Hands On/Automatic) type magnetic starter switch is used, the selector switch may have been moved from the automatic position	1. Check switch and turn selector to the automatic position.
	C. Exhaust fan circuit breaker tripped.	1. Reset circuit breaker
	D. If the system is equipped with a disconnect switch for the exhaust fan, a fuse or fuses may have blown out.	1. Check continuity of fuses and replace if necessary.
3. When the "Start Fan" button is pushed and after the 45 second delay, the exhaust fan comes on but the damper does not open.	A. There may be an incomplete circuit between the damper motor and the C-6000 control. (N/A on CG3-FDD, CG3-FDT, and CG3-ND)	1. Check outputs #17 & 19, on C-6000 for voltage (24 VAC). 2. Check outputs #17 & 18, on C-6000, for voltage. C-6000 or C-6000-A Fan On = approx.6 VDC Fan Off = approx. 14 VDC C-6000-B Fan On = approx. 0 VAC Fan Off = approx. 24 VAC 3. Check wiring connections at the ventilator J-boxes following wire numbers as described in A/1. & A/2 above.
	B. There may be a problem with the PLC (Programmable Logic Controller) in the command center.	1. Check the appropriate status light on the PLC (Refer to the PLC status light chart on Page 31.)
	C. If the PLC status lights check out, there may be a problem with the damper motor or the wiring going to the damper motor.	1. If there is more than one ventilator on the system visually check each damper. If only one out of two or more dampers is closed, check the control for mechanical failure. If mechanical components are ok, remove inspection panel and check lines 17 & 19
	D. The Damper Positioner(s) may be set incorrectly on C-6000 or C-6000-A.(N/A on CG3-FDD, CG3-FDT, and CG3-ND	1. Set the Damper Positioner(s) to 50 for Normal Operation.
WASH SYSTEM		
1. When the "Start Wash" button is pushed, the green light does not come on, and the damper does not move to the wash position.	A. The control is in an Internal Fire Mode.	1. Check for continuity between #**15** and **GXT**. If there is no continuity between **#15** and **GXT**, refer to FIRE CYCLE in the TROUBLE -SHOOTING section.
2. The ventilator is not washing properly.	A. Water supply turned off or partially on.	1. Check the hand valve inside the control cabinet. 2. Check any valves upstream of the control cabinet.
	B. Low water pressure.	1. Check the water pressure gauge inside the control cabinet. Pressure should be 40 PSI min. while the ventilators are washing.
	C. Low water temperature	1. Check the temperature gauge inside the control cabinet. The temperature should be between 140°F-180°F. If below temperature it must be increased.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
WASH SYSTEM CONT.		
2. The ventilator is not washing properly.	D. Inadequate wash time	1. Increase length of wash time.The length of the wash cycle may be set between 3 and 9 minutes. Recommended times are: 3 minutes for light-duty equipment, 5 minutes for medium duty and 9 minutes for heavy-duty equipment. (Refer to wash timing instructions on Page 15 to adjust the length of wash cycle.)
	E. Clogged spray nozzles.	1. While the wash cycle is on, open the inspection door slightly and visually check spray of nozzles. If a nozzle is clogged, remove, and clean by running a small wire through it.
	F. Detergent pump lost its prime or not pumping properly.	1. Refer to Page 12 for trouble shooting detergent pump.
	G. Detergent tank empty.	1. Check and fill detergent weekly.
	H. Improper detergent.	1. Refer to Page 13 for recommended detergent.
	I. Inadequate wash frequency.	1. Normally only one wash is required in a cooking day. However, if the cooking operation is extremely heavy, such as char broiler and wok cooking it may be necessary to wash twice in a cooking day.
3. Water does not come on when "Start Wash" is pushed, but exhaust fan turns off and damper closes, to the wash position	A. Water supply turned off	1. Check hand valve inside control cabinet. 2. Check any hand valve upstream of control cabinet.
	B. Malfunctioning solenoid valve. If the pump is operating there is a problem with the valve or valve wiring.	1. Coil may be burned out. Check continuity. 2. Foreign material in the hot water supply line may have clogged the solenoid valve and prevented its opening. If this is the case, a light tap on the solenoid valve housing will release the valve. 3. Check wiring diagram for proper wire # 9-13 and check for 120 volts during wash.
	C. Malfunctioning PLC.	1. Check the appropriate status light on the PLC (Refer to PLC status light chart on Page 31). If the appropiate status light is not on, the PLC needs to be reprogrammed or possibly replaced.
	D. Loose connection to solenoid valve.	1. Tighten connection.
4. Water sprays on when the ventilator is not in a wash cycle ("Wash On" not displayed on command center).	A. If "Fire in Hood" is displayed on the C-6000 command center and the red light is on continuous. (N/A on CG3-FDD and CG3-ND)	1. The internal fire mode has been activated via thermostats. Refer to "Fire Cycle" in this trouble-shooting section.
	B. If "Ext. Fire Active" is displayed on the C-6000 command center and the red light is flashing.	1. The remote fire switch has been pulled. Refer to "Fire Cycle" in this trouble-shooting section.
	C. Debris stuck in solenoid valve.	1. Turn off the water and disassemble solenoid valve. Remove debris and reassemble.

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
FIRE CYCLE		
1. If the ventilator is in an internal fire cycle, "Fire in Hood" is displayed and the red light is on continuous, water sprays on and the damper closes to the fire position, but there is not a fire. (N/A on CG3-FDD and CG3-ND)	A. Faulty thermostat, or break in thermostat circuit.	1. Check continuity of thermostats and circuit. Refer to wiring diagram on Pages 42-49. Note: Thermostats are wired in parallel. Replace thermostat(s) if required. Check for jumper between GXT and 15. If GX2 hoods are connected, check for continuity between GXT and 15. If not, trace out circuit and find break.
2. If the ventilator is in an external fire mode "Ext. Fire Active" displayed and the red light flashes, water sprays on and exhaust fan on but there is no fire.	A. The remote Fire Switch (If provided) has been pulled.	1. Open the Fire Switch and flip the toggle switch to the "Normal position". (Refer to Page 9 for illustration)
	B. The external fire mode may have been initiated from another source, such as a building alarm system, DDC system, pre-engineered fire system etc.	1. Disconnect wires from terminals 4 and FS to isolate external sources. If external fire mode stops investigate external sources and remove cause.
3. If the damper is in the fire position but the unit is not in an internal fire mode ("Fire in Hood" displayed, water sprays on.) (N/A on CG3-FDD and CG3-ND)	A. There may be a problem with the PLC (Programmable Logic Controller) in the command center.	1. Check the appropriate status light on the PLC (Refer to the PLC status light chart on Page 31). If the output light is not on, the PLC needs to be reprogrammed or possibly replaced.
	B. If the PLC output lights check out, there may be a problem with the damper motor or the wiring going to the damper motor.	1. If there is more than one ventilator on the system visually check each damper. If only one out of two or more dampers is closed, check the control for mechanical failure, etc. If mechanical components are ok, remove damper actuator access panel and check lines 17 and 19 for power. If there is power, then the damper motor must be replaced.
	C. The Damper Positioner on a C-6000 or C-6000-A may be set incorrectly.	1. Set the Damper Positioner on a C-6000 or C-6000-A to 50 for Normal operation.
BACK FLOW PREVENTERS		
Model GPC-6000-VB Series control cabinets use a vacuum breaker/check valve assembly for backflow prevention. Model GPC-6000 Series control cabinets use a reduced pressure principle device (RP) for backflow prevention. Refer to Pages 33 through 35 for illustrations of each. The type of backflow preventer used is dictated by state, county or city code.		
1. **VACUUM BREAKERS** Vacuum breaker leaks or spits either at the beginning or end of the wash cycle.	A. Improper Installation.	1. Vacuum breaker must be mounted 6" higher than line going to the ventilator. (See illustration on Page 18).
	B. Sticking check valve.	1. Remove the top cap of the vacuum breaker and check to make sure the nylon check valve slides up and down on the guide stem properly, and that the stem is straight. Clean stem or straighten as necessary.
	C. Deteriorated check valve washers.	1. Check to make sure that the rubber washer on top of the nylon check seats properly against the machined surface, and that the surfaces of both the rubber washer and the machined surface are smooth. Replace check if necessary.

TROUBLE-SHOOTING

SYMPTOM	POSSIBLE PROBLEM	CORRECTIVE ACTION
BACK FLOW PREVENTERS CONT.		
RP DEVICE 2. Intermittent discharge of water.	A. Intermittent discharge of water through the relief valve is fairly common and usually occurs if there is inlet pressure fluctuations of more than 3 psi and when the solenoid valve closes after a wash cycle.	1. No action necessary.
3. Continuous discharge of water when ventilator is not in a wash cycle.	A. Foreign material in the check valve.	1. Leave the inlet hand valve open and close the outlet hand valve. If there is still continuous discharge it indicates that foreign material is preventing the first check valve from closing. If flushing will not clear the unit, remove and clean the first check valve. (Refer to illustration on Page 20)
4. Continuous discharge of water out relief valve when ventilator is washing.	A. Foreign material in relief valve.	1. Foreign material preventing complete closing of the relief valve. Flushing the relief valve may correct this condition. Repeat procedure if necessary. If flushing does not stop discharge with flow through device, remove and clean relief valve. In no case should the relief valve outlet port be plugged, closed off or restricted.
DRAINS		
1. If during a wash cycle water oveflows the gutter and comes out inlet slot.	A. Clogged drain outlet (Note: Each ventilator section has its own drain outlet).	1. Reach in through the inlet slot of the ventilator and check to see if foreign material such as rags, paper towels, order chits, etc., have clogged the drain opening.
	B. Drain system clogged (If more than one ventilator system is not draining it indicates that the drain system is clogged.	1. A chemical drain cleaner applied as per instructions may dissolve stoppage. Pour cleaner into main grease gutter at drain opening. 2. Hire a drain rooter service to clear entire system.
	C. Pre-flush line not in drain opening.	1. This line is located in the ventilator and runs from the spray manifold to the ventilator drain. Check to make sure that the pre-flush line is aimed into the drain opening so that it purges the drain properly.
	D. Clogged or full grease trap	1. Some cities and counties have codes which require grease traps.If a grease trap is in use, check to ensure that it is not clogged.
MISCELLANEOUS		
1. "Enter Code" displayed on C-6000 Command Center.	1. Enable Code has not been entered at factory.	1. Contact Factory.
2. Wrong language displayed on C-6000 Command Center.	2. "English / Espanol" button has been pressed.	2. Press the "English / Espanol" button to toggle the language displayed between English and Spanish (Espanol).

PLC STATUS LIGHT CHARTS

The following is a list of how the status lights will appear on the PLC (Programmable Logic Controller) that is operating correctly.

	X (Inputs)	STANDARD (SINGLE OR SEQUENTIAL WASH) DESCRIPTION - PLC
PLC	0	**On** while “Fire Test Switch” is pushed and held, or hood is in Internal Fire Mode. **Off** during "Cool Down Cycle"
	1	**On** when Remote Fire Switch is activated, or when hood is in External Fire Mode.
	2	**On** normally. It shuts **off** if cabinet is equipped with Low Detergent alert feature and the detergent is low.
	3	**Off** normally. **On** when Jumper is installed to disable Wash Solenoids from opening during Internal Fire Mode and External Fire Modes.
	4	Wash permission signal (if so equipped)
	5	Not Used
	6	Not Used
	7	Not Used
	Y (Outputs)	**STANDARD (SINGLE OR SEQUENTIAL WASH) DESCRIPTION - PLC**
	0	**On** when Wash Solenoid # 1 should be open.
	1	**On** during an Internal or External Fire Mode. **On** during "Cool Down Cycle".
	2	**On** when Detergent Pump should be on.
	3	**On** when Exhaust Fan should be on.
	COM	Never comes on
	4	**On** when Supply Fan should be on.
	COM	Never comes on
	5	**On** when damper is in "Wash" position, or while damper is moving to "Wash" position

	Y (Outputs)	(SEQUENTIAL WASH "S2-S5") DESCRIPTION - EXPANSION MODULE
EXPANSION MODULE SEQUENTIAL "S2-S5"	0	**On** when Wash Solenoid # 2 should be open.
	1	**On** when Wash Solenoid # 3 should be open.
	2	**On** when Wash Solenoid # 4 should be open.
	3	**On** when Wash Solenoid # 5 should be open.
	4	Not Used
	5	Not Used
	6	Not Used
	7	Not Used

C-6000, C-6000-A and C-6000-B Terminal Voltages

(See page no. 25 to determine which model is present)

	TERMINAL	DESCRIPTION	FAN OFF	FAN ON	WASH ON	INT. FIRE	EXT. FIRE
	L1	Main Power Connection : Hot	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
	L2	Main Power Connection : Neutral	Common				
	1	Output to Supply Fan Motor Starter	0 VAC	120 VAC	0 VAC	0 VAC	0 VAC
	2	Output to Detergent Pump	0 VAC	0 VAC	120 VAC	0 VAC	0 VAC
	3	Thermostat Return	0 VAC	0 VAC	0 VAC	24 VAC	0 VAC
	4	Fused Supply to PLC Outputs & Etc.	120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
	5	120 VAC Neutral Leg	High Voltage Common				
	8	Output to Exhaust Fan Motor Starter	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	CM	Output to Cold Water Mist Solenoid	0 VAC	120 VAC	0 VAC	0 VAC	120 VAC
	9	Output to Wash Solenoid Valve #1	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	10	Output to Wash Solenoid Valve #2	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	11	Output to Wash Solenoid Valve #3	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	12	Output to Wash Solenoid Valve #4	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	13	Output to Wash Solenoid Valve #5	0 VAC	0 VAC	120 VAC	120 VAC	120 VAC
	SF1 SF2	N.O. Dry Contacts for Supply Fan Remote Control Center	Open	Closed	Open	Open	Open
	EF1 EF2	N.O. Dry Contacts for Exhaust Fan Remote Control Center	Open	Closed	Open	Open	Closed
	A1 A2	N.O. Dry Contacts for Interface to Building Fire Alarm / Monitor System	Open	Open	Open	Closed	Closed
	Q1 Q2	N.C. Dry Contacts for Interface to Fire System Fuel Shutoff Control	Closed	Closed	Closed	Open	Open
	FS	Input from Remote Fire Switch	0 VAC	0 VAC	0 VAC	0 VAC	120 VAC
(1)	LD	Input from Detergent Flow Switch	NO Low Detergent Sensor (Jumper J1 is present)				
			120 VAC	120 VAC	120 VAC	120 VAC	120 VAC
(2)	LD	Input from Detergent Flow Switch	Low Detergent Sensor (Jumper J1 is cut or NOT present)				
			0 VAC	0 VAC	0 VAC	0 VAC	0 VAC
	GX	Power for GX2 Damper Actuators	0 VAC	24 VAC	0 VAC	0 VAC	24 VAC
	15	Output to Thermostat(s)	24 VAC	24 VAC	24 VAC	24 VAC	24 VAC
	17	24 VAC Common	Low Voltage Common				
	18	CG3 Damper Drive Signal [1-10]	C-6000 or C-6000-A				
			14 VDC	6 VDC	14 VDC	6 VDC	6VDC
	18	CG3 Damper Drive Signal	C-6000-B				
			24 VAC	0 VAC	24 VAC	0 VAC	0 VAC
	19	Power for CG3 Damper Actuators	24 VAC	24 VAC	24 VAC	0 VAC	24 VAC
(3)	20	CG3 Damper Drive Signal [11-20]	14 VDC	6 VDC	14 VDC	6 VDC	6VDC
	GXT	Thermostat Return for GX2 Hoods	24 VAC	24 VAC	24 VAC	24 VAC	24 VAC

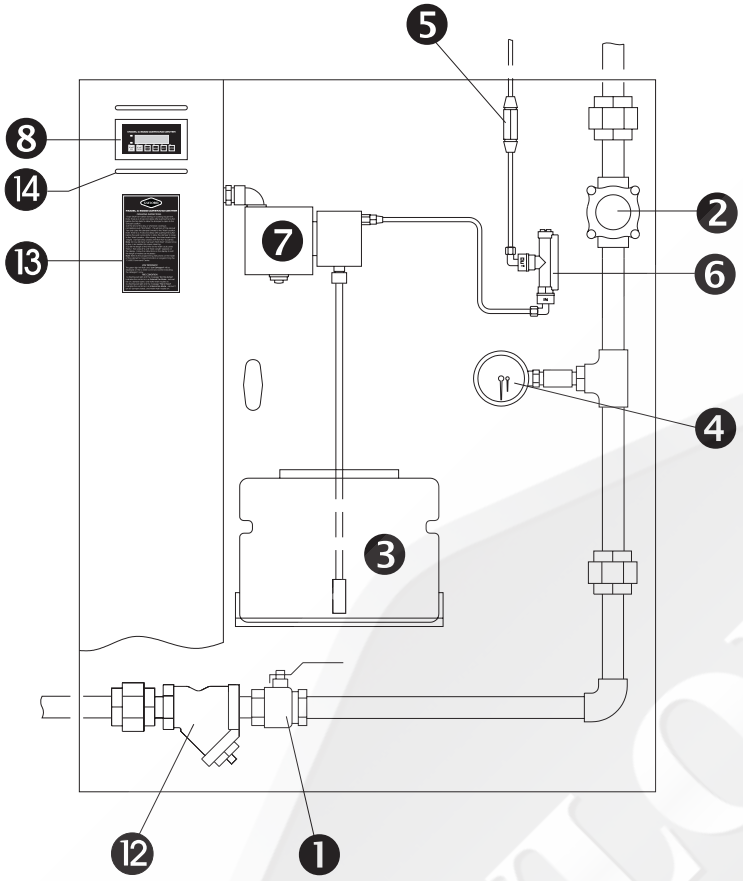
(1) 120 VAC - A jumper is installed between LD and #4 or Jumper J1 is present (No LD/Detergent Flow Switch Present)

(2) 120 VAC - LD (Detergent Flow Switch) is installed and Detergent Pump is running and Detergent is present
0 VAC - LD (Detergent Flow Switch) is installed and Detergent Pump is running and Detergent is NOT present

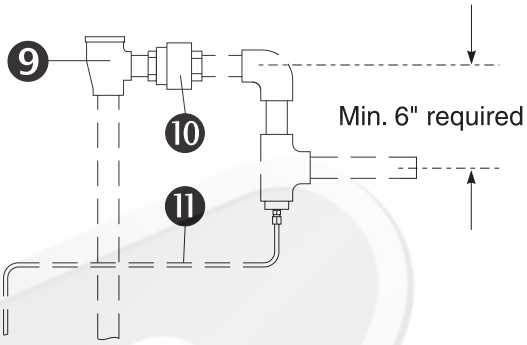
(3) #20 is only present on the C-6000-A control
#20 only has voltage when there are 2 Damper Positioners present (C-6000-20), otherwise voltage is 0 VAC

MODEL GPC-6000-VB SERIES CONTROL CABINET

This Control Cabinet Is Used When A Reduced Pressure Principle Device Backflow Preventer Is Not Required And A Vacuum Breaker Is Allowed For Backflow Prevention



MODEL "GPC-6000-VB" SERIES CONTROL CABINET

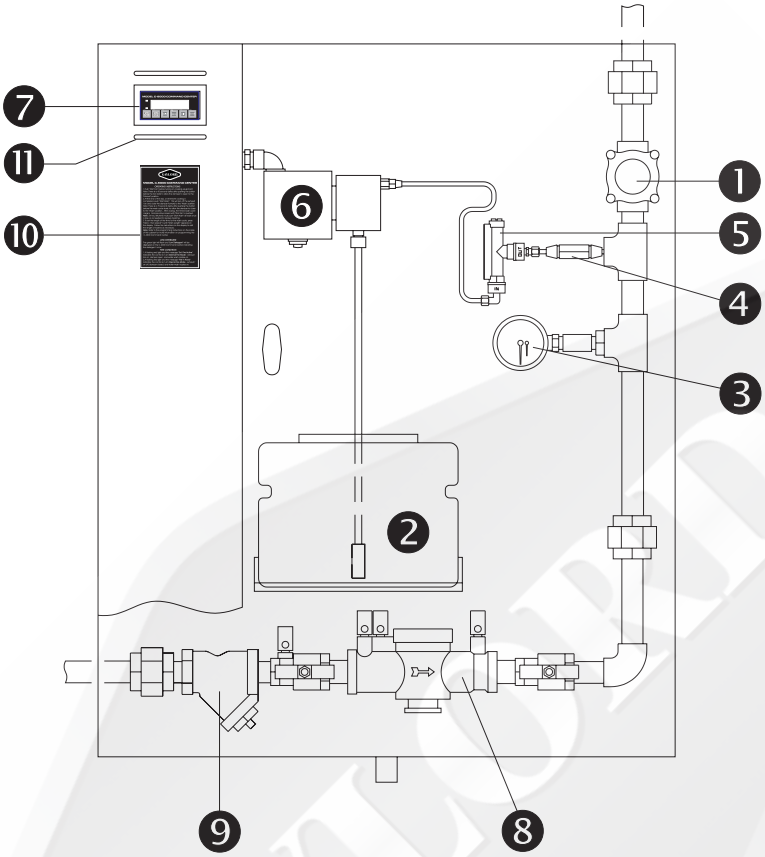


TYPICAL VACUUM BREAKER CHECK VALVE ARRANGEMENT

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1.	Ball Valve	(Specify Size)
2.	Solenoid Valve	
	A. Replacement Coil (120 Volt)	10156
	(220 Volt)	10157
	B. Solenoid Valve Repair Kit ..... Pipe Size: 3/4"	14388
	..... Pipe Size: 1"	14389
	..... Pipe Size: 1-1/4"	14390
	..... Pipe Size: 1-1/2"	14391
3.	Detergent Tank (2 Gallon)	10221
4.	Pressure / Temperature Gauge	10175
5.	Detergent, Brass Check Valve	10265
6.	FS-4 Series Detergent Flow Switch (Optional)	16892
7.	Detergent Pump .....(120 Volt)	10222
	.....(220 Volt)	10223
8.	Command Center Model C-6000 Series	(Refer to Page 37-38)
9.	Vacuum Breaker	(Specify Size)
	A. Vacuum Breaker Repair Kit	(Specify Size)
10.	Water Check Valve	(Specify Size)
11.	3/8" O.D. Copper Tubing	13209
12.	Line Strainer	(Specify Size)
13.	C-6000 Faceplate	18899
14.	4" Pull Handle Kit (2)	75587

MODEL GPC-6000 SERIES CONTROL CABINET

This Control Cabinet Is Used When A Reduced Pressure Principle Device Backflow Preventer Is Required.

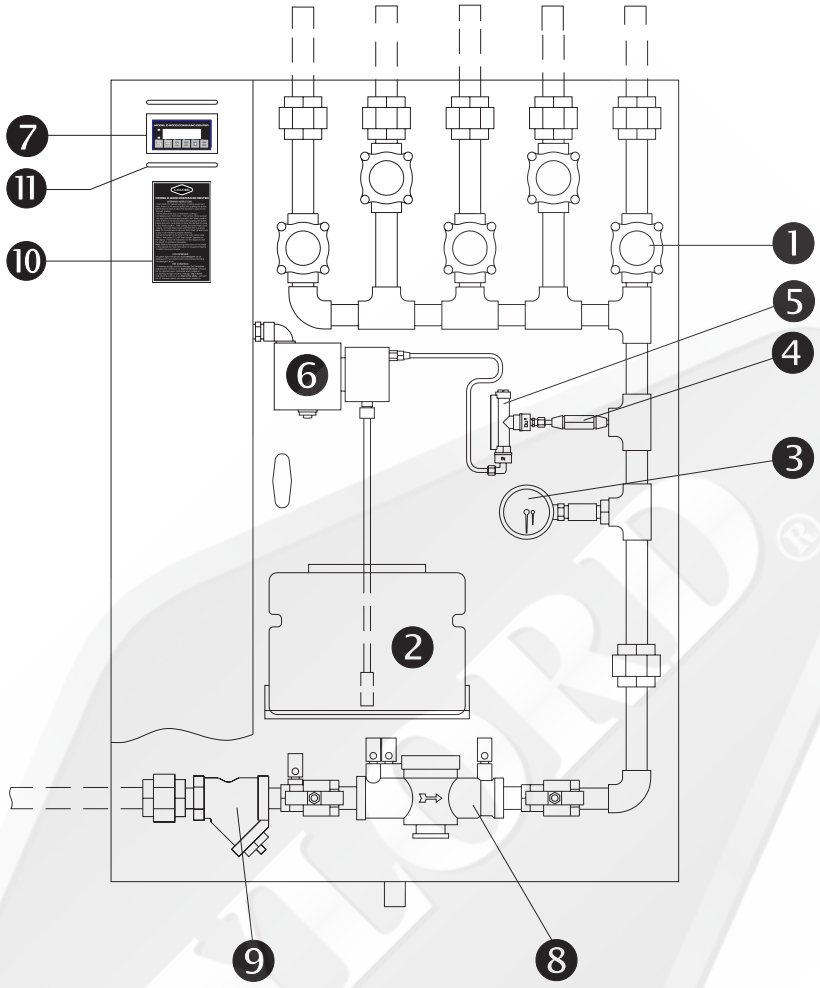


MODEL "GPC-6000"
SERIES CONTROL CABINET

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1.	Solenoid Valve	(Specify Size)
	A. Replacement Coil (120 Volt)	10156
	(220 Volt)	10157
	B. Solenoid Valve Repair Kit ..... Pipe Size: 3/4"	14388
	..... Pipe Size: 1"	14389
	..... Pipe Size: 1-1/4"	14390
	..... Pipe Size: 1-1/2"	14391
2.	Detergent Tank (2 Gallon)	10221
3.	Pressure / Temperature Gauge	10175
4.	Detergent, Brass Check Valve	10264
5.	FS-4 Series Detergent Flow Switch (Optional)	16892
6.	Detergent Pump ..... (120 Volt)	10222
	..... (220 Volt)	10223
7.	Command Center Model C-6000 Series	(Refer to Page 37-38)
8.	Backflow Preventer "RP" Device Type	(Specify Size)
9.	Line Strainer	(Specify Size)
10.	C-6000 Faceplate	18899
11.	4"Pull Handle Kit (2)	75587

MODEL GPC-6000-S SERIES CONTROL CABINET

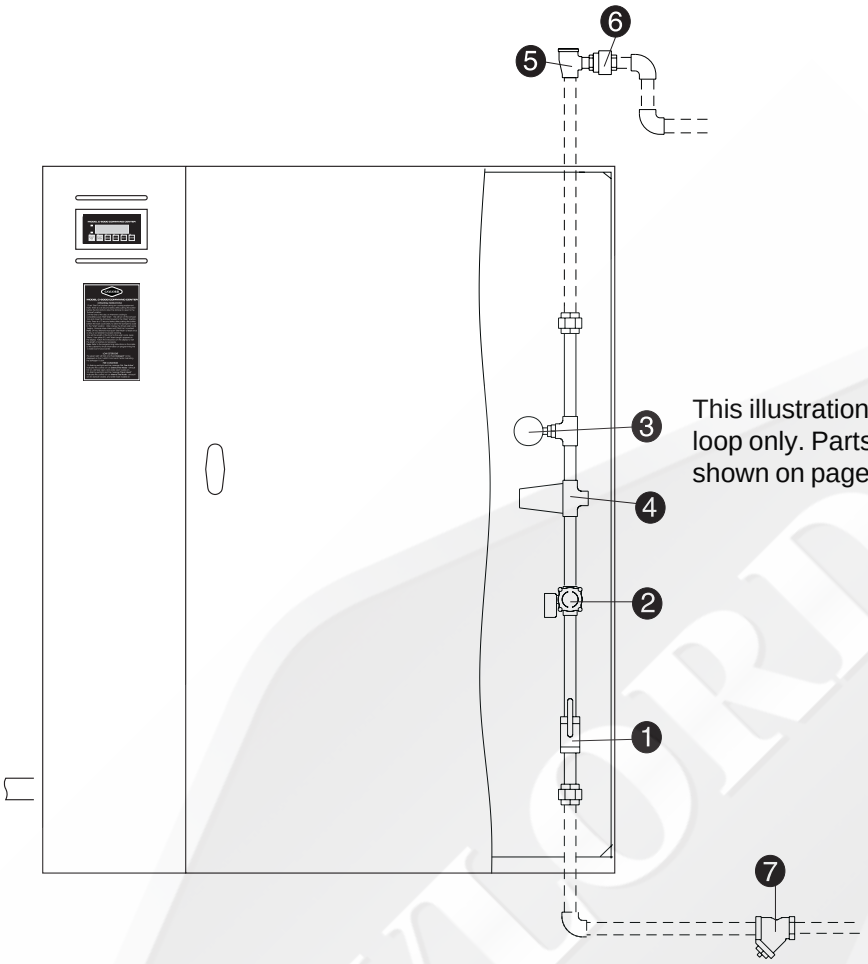
This Control Cabinet Is Used When Ventilators Are Washed In Sequence Groups.



MODEL "GPC-6000-S" SERIES CONTROL CABINET

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1.	Solenoid Valve	(Specify Size)
	A. Replacement Coil (120 Volt)	10156
	(220 Volt)	10157
	B. Solenoid Valve Repair Kit ..... Pipe Size: 1/2"	14387
	..... Pipe Size: 3/4"	14388
	..... Pipe Size: 1"	14389
	..... Pipe Size: 1-1/4"	14390
	..... Pipe Size: 1-1/2"	14391
2.	Detergent Tank (2 Gallon)	10221
3.	Pressure / Temperature Gauge	10175
4.	Brass Check Valve	10264
5.	FS-4 Series Detergent Flow Switch (Optional)	16892
6.	Detergent Pump ..... (120 Volt)	10222
	..... (220 Volt)	10223
7.	Command Center Model C-6000 Series	(Refer to Page 37-38)
8.	Backflow Preventer "RP" Device Type	(Specify Size)
9.	Line Strainer	(Specify Size)
10.	C-6000 Faceplate	18899
11.	4"Pull Handle Kit (2)	75587

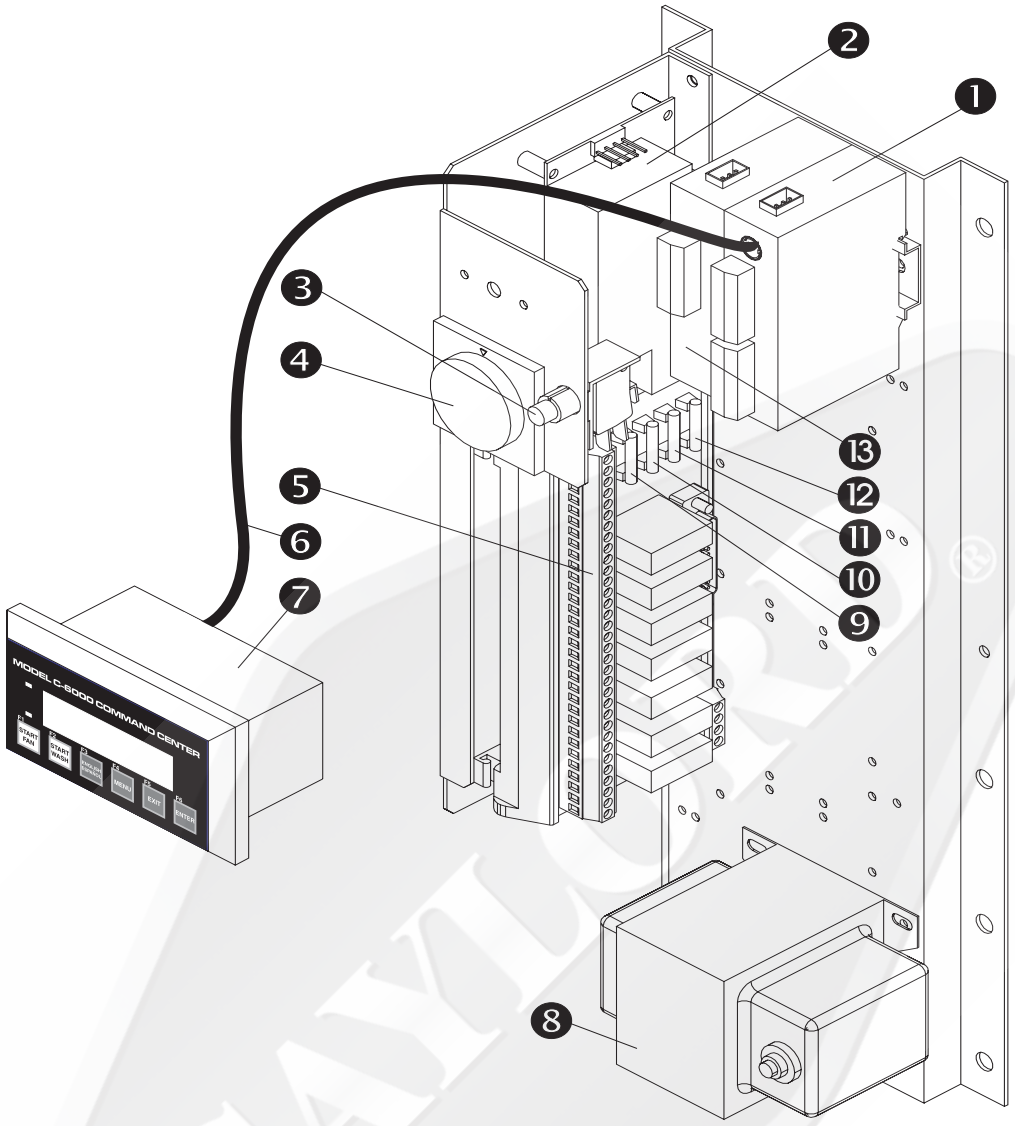
WITH OPTIONAL CONTINUOUS COLD WATER MIST



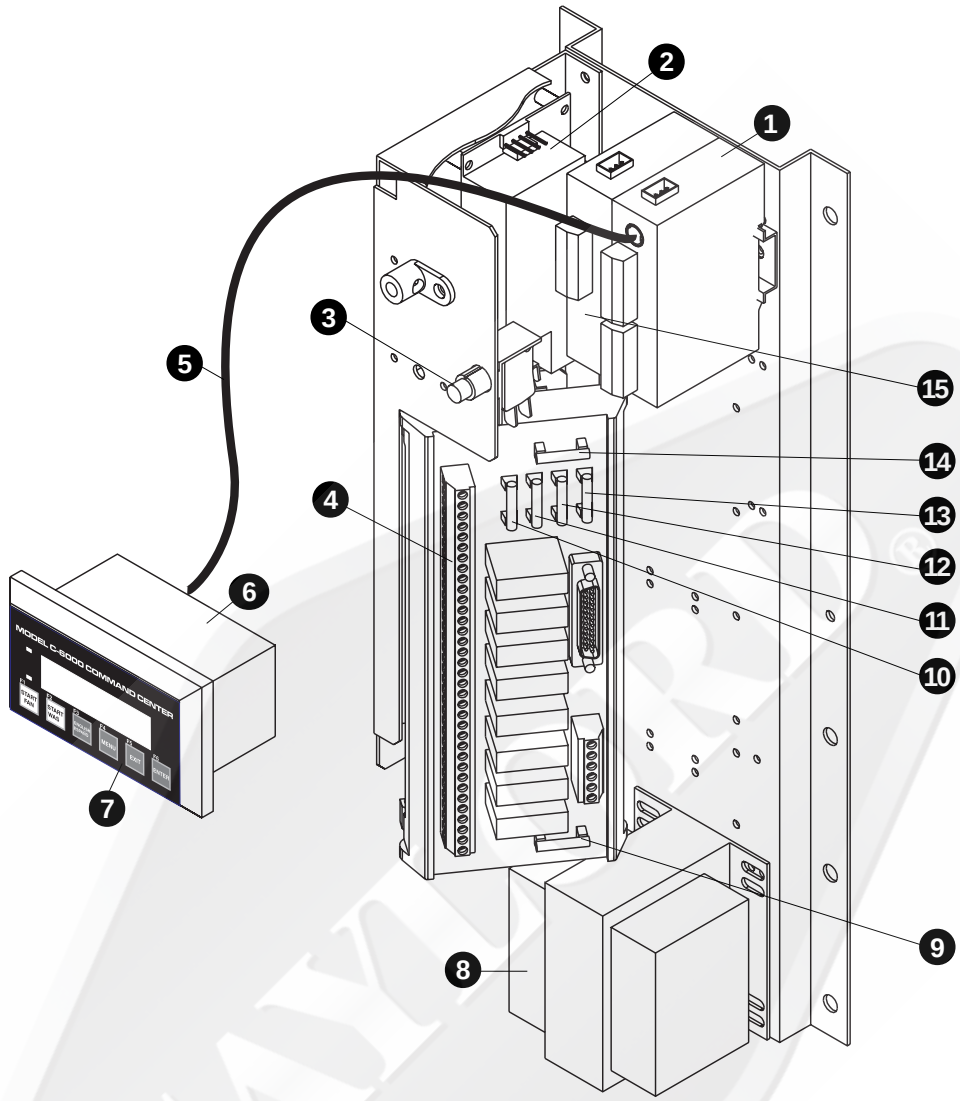
This illustration shows the cold water mist loop only. Parts for the hot water loop are shown on pages 33, 34 and 35.

MODEL "GPC-6000-CM" SERIES CONTROL CABINET

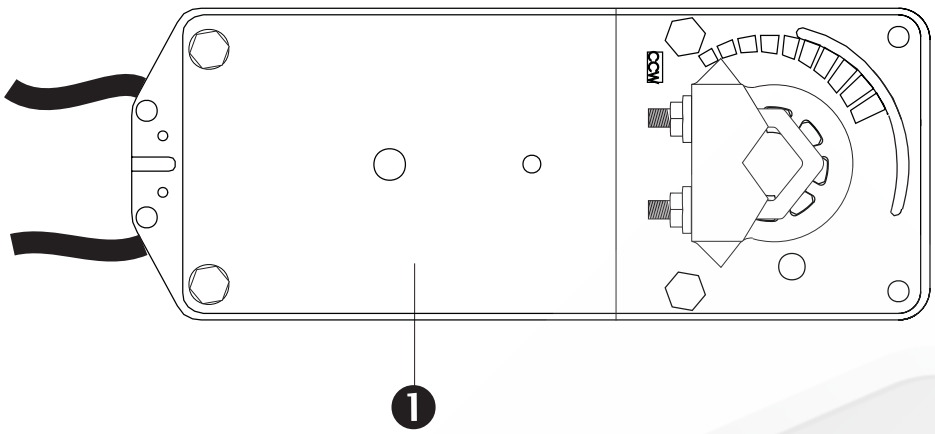
PC. NO.	DESCRIPTION	GAYLORD PART NO.
1.	1/2" Ball Valve	11258
2.	1/2" Solenoid Valve NC	10135
	A. Replacement Coil (120 Volt)	10156
	(220 Volt)	10157
	B. Solenoid Valve Repair Kit ..... Pipe Size: 1/2"	14387
3.	Pressure Gauge	10276
4.	1/2" Water Pressure Reducing Valve	10924
5.	1/2" Vacuum Breaker	10177
	A. Vacuum Breaker Repair Kit	10178
6.	1/2" Water Check Valve	10195
7.	1/2" Line Strainer	10151



PC. NO.	DESCRIPTION	GAYLORD PART NO.	MFG PART NO.
1	Programmable Logic Controller (PLC) w/ Program	75634	
2	24VDC Power Supply	18863	
3	Fire Test Switch	16894	
4	Damper Positioner	18876	
5	Output Module	18779	
6	PLC to Operator Interface Cable	18868	
7	Operator Interface	75636	
8	100 VA Transformer	18861	
9	Fuse (F1) - 2 Amp 24VDC Power Supply	13062	BUSS AGC-2
10	Fuse (F2) - 4 Amp PLC - 120 VAC	10039	BUSS AGC-4
11	Fuse (F3) - 1 Amp Supply Fan Mag. Starter	19027	BUSS MDL-1
12	Fuse (F4) - 1 Amp Exhaust Fan Mag. Starter	19027	BUSS MDL-1
13	Expansion Module (Optional - used for S2-S5)	18867	
14	Flash Guard (Not Shown)	18877	



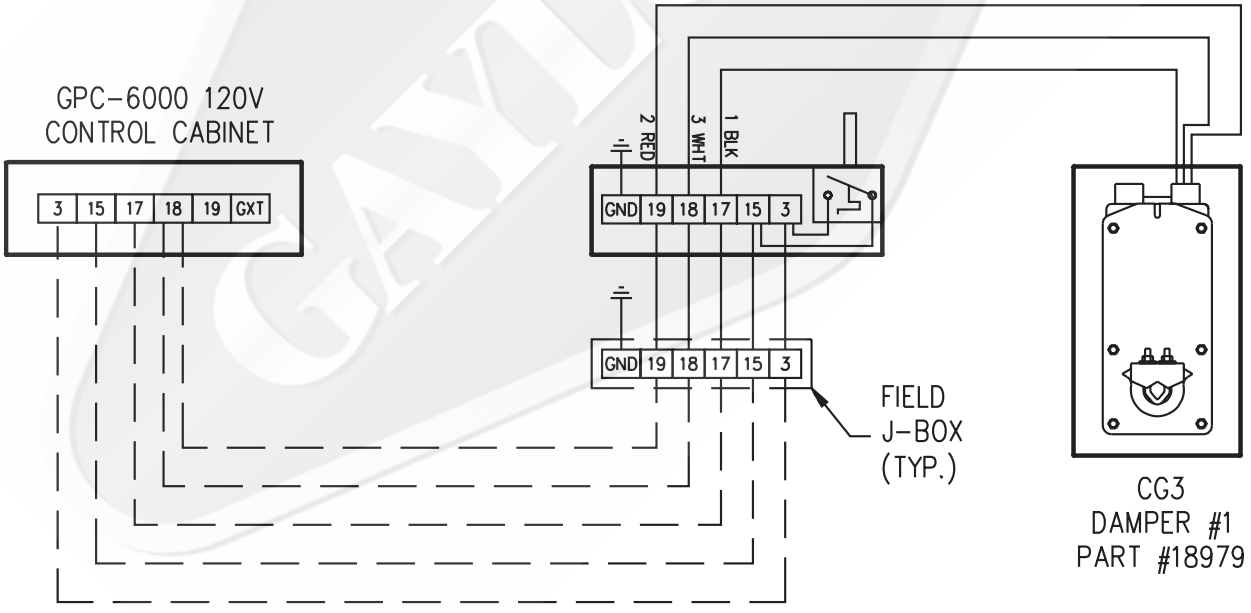
	C-6000-ESP-S Component Schedule (1-3 Transformers/High Voltage Power Supplys)		
	PC. NO.	DESCRIPTION	GAYLORD PART NO.
	1	Programmable Logic Controller (PLC) w/ Program	75634
*	2	Expansion Module	18866
	3	24VDC Power Supply	18863
	4	Fuse (F7) - Size Varies	
	5	Fire Test Switch	16894
	6	C-6000-B Output Module	18983
	7	PLC to Operator Interface Cable	18868
	8	Operator Interface w/program & Mylar label	75871
	9	Operator Interface Mylar Label	19010
	10	100 VA Transformer [**C-6000-10**]	18981
	11	Control Relay - SPDT (CR9) **ESP Fire Signal**	11399
		Socket - SPDT 11, 12, 13, 14, 17, 18, 20	11413
	12	Control Relay - SPDT (CR10)	11399
		Socket - SPDT	11413
	13	Control Relay -SPDT (CR11)	11399
		Socket - SPDT	11413
	14	Control Relay - SPDT (CR12)	11399



Used in CG3, CG3-FDL, and CG3-FDT only

PC. NO.	DESCRIPTION	GAYLORD PART NO.
1	For C-6000 or C-6000-A: Damper Control Motor - AF24-SR (24 Volt) ----------	30204
1	For C-6000-B: Damper Control Motor - AF24-MFT P-10050 (24 Volt) ---------- or AF24-MFT S-0001 (24 Volt) ----------	18979

CG3-FDL WIRING NOTES



CG3-FDL WIRING NOTES w/C-6000-B:

1. ADD FIRE DAMPER LOCKOUT BRACKET, "FDL" BRACKET, TO DAMPER ON VENTILATOR
2. WIRE #'S 18 & 19 FROM VENTILATOR CONNECT TO #18 IN THE GPC-6000 CONTROL CABINET.

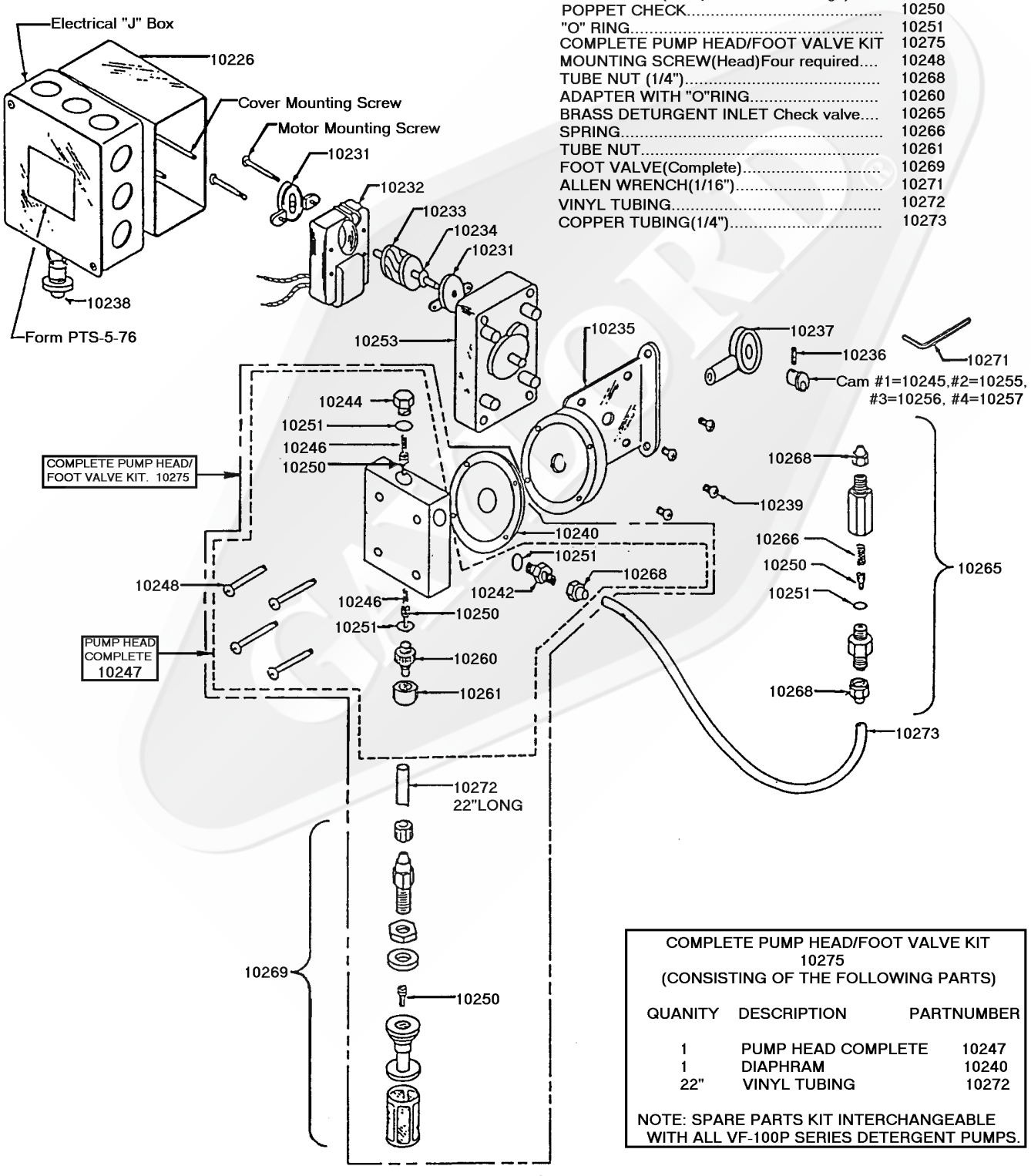
DETERGENT PUMP

DETERGENT PUMP

MODEL NUMBER VF-100P-60B

ITEM.	PART NUMBER
MOTOR COVER	10226
ELECTRICAL "J" BOX	N/A
COVER MOUNTING SCREWS	N/A
MOTOR MOUNTING SCREWS	N/A
ARMATURE BEARING	10231
COIL (115 VOLT)	10232
COIL (220 VOLT)	10259
ARMATURE	10233
ARMATURE SPACER	10234
GEAR BOX ASSEMBLY	10253
BRACKET	10236
SET SCREW	10237

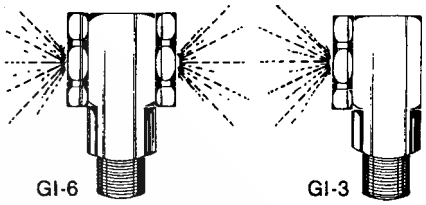
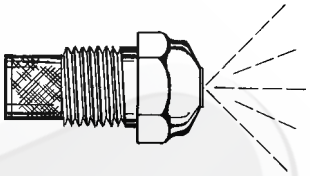
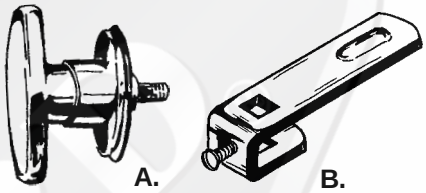
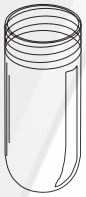
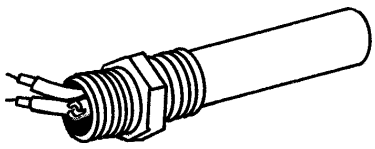
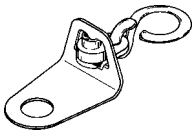
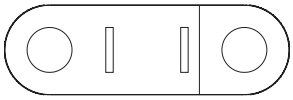
ITEM.	PART NUMBER
YOKE AND BEARING ASSEMBLY	10237
PUSH BUTTON TEST SWITCH	10238
CAM #1	10254
CAM #2	10255
CAM #3	10256
CAM #4	10257
SCREWS FOUR REQUIRED	10239
DIAPHRAGM	10240
BRASS OUTLET	10242
*TOP CAP	10244
SPRING	10246
PUMP HEAD (Complete with all fittings)	10247
POPPET CHECK	10250
"O" RING	10251
COMPLETE PUMP HEAD/FOOT VALVE KIT	10275
MOUNTING SCREW(Head)Four required	10248
TUBE NUT (1/4")	10268
ADAPTER WITH "O"RING	10260
BRASS DETURGENT INLET Check valve	10265
SPRING	10266
TUBE NUT	10261
FOOT VALVE(Complete)	10269
ALLEN WRENCH(1/16")	10271
VINYL TUBING	10272
COPPER TUBING(1/4")	10273



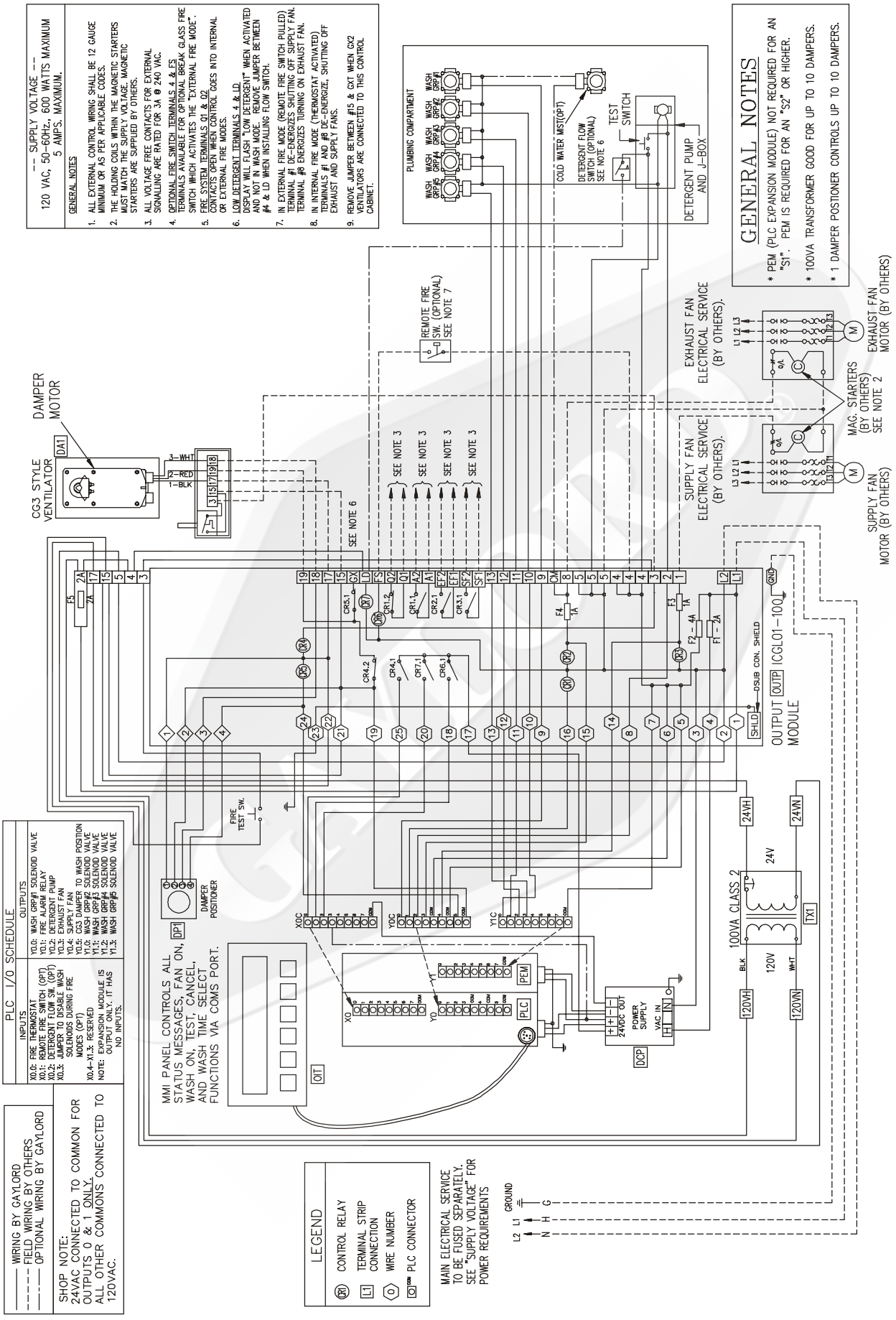
COMPLETE PUMP HEAD/FOOT VALVE KIT 10275 (CONSISTING OF THE FOLLOWING PARTS)		
QUANITY	DESCRIPTION	PARTNUMBER
1	PUMP HEAD COMPLETE	10247
1	DIAPHRAM	10240
22"	VINYL TUBING	10272

NOTE: SPARE PARTS KIT INTERCHANGEABLE WITH ALL VF-100P SERIES DETERGENT PUMPS.

MISCELLANEOUS VENTILATOR PARTS

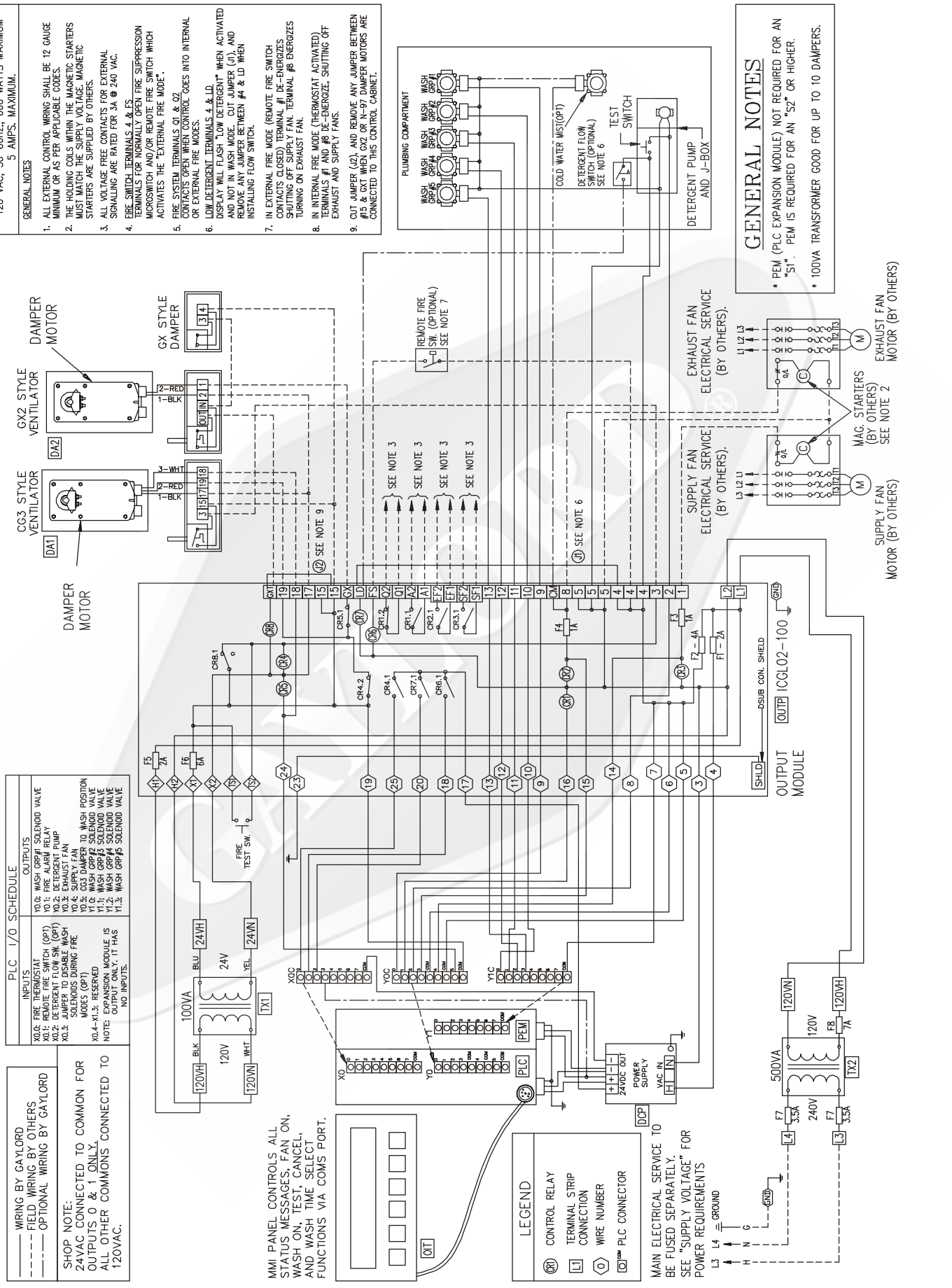
GAYLORD PART NO.	DESCRIPTION	ILLUSTRATION
	SPRAY NOZZLES	
10303	Single Head	
10304	Double Head	
10305	High Volume (Single Head)	
15330	**COLD WATER MIST NOZZLES**	
	VENTILATOR & CONTROL CABINET DOOR HANDLES	
10308	A. Handle Complete	
10309	B. Tongue Only	
	LIGHT GLOBE	
10119	Kason	
	INCANDESCENT LIGHT LENS & FRAME	
13211	12" x 12" Recessed Light Lens & Retainer	
	FLUORESCENT LIGHT LENS & FRAME	
13210	2 Ft. Recessed Light Lens & Retainer	
10111	3 Ft. Recessed Light Lens & Retainer	
10112	4 Ft. Recessed Light Lens & Retainer	
	EXHAUST DUCT THERMOSTATS	
18465	12" Length 250°F	
18466	15" Length 250°F	
10321	**165°F SUPPLY DUCT FIRE DAMPER FUSE LINK**	
10323	For CG3-FDD and CG3-FDT **280°F EXHAUST DUCT FIRE DAMPER FUSE LINK**	

120 VOLT


-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz, 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALLING ARE RATED FOR 3A @ 240 VAC.
4. OPTIONAL FIRE SWITCH TERMINALS 4 & F5 TERMINALS AVAILABLE FOR OPTIONAL BREAK GLASS FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS 01 & 02 CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. REMOVE JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH PULLED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #5 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #5 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. REMOVE JUMPER BETWEEN #15 & GXT WHEN GX2 VENTILATORS ARE CONNECTED TO THIS CONTROL CABINET.
PLUMBING COMPARTMENT
WASH GRP#5
WASH GRP#4
WASH GRP#3
WASH GRP#2
WASH GRP#1
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "ST". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
* 1 DAMPER POSITIONER CONTROLS UP TO 10 DAMPERS.
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN MOTOR (BY OTHERS)
MAG. STARTERS (BY OTHERS) SEE NOTE 2
CG3 STYLE VENTILATOR
DAMPER MOTOR
DA1
3-WHT
2-RED
1-BLK
SEE NOTE 6
SEE NOTE 3
OUTPUT MODULE
OUTP ICGLO1-100
DSUB CON. SHIELD
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
OIT
PLC
PEM
DCP
DP1
DAMPER POSITIONER
FIRE TEST SW.
24VDC OUT
POWER SUPPLY
VAC IN
100VA CLASS 2
TX1
120V
BLK
WHT
24V
24VH
24VN
120VH
120VN
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SW. (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY. IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: WASH DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY
ALL OTHER COMMONS CONNECTED TO 120VAC.
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
L2
L1
N
H
G
GROUND

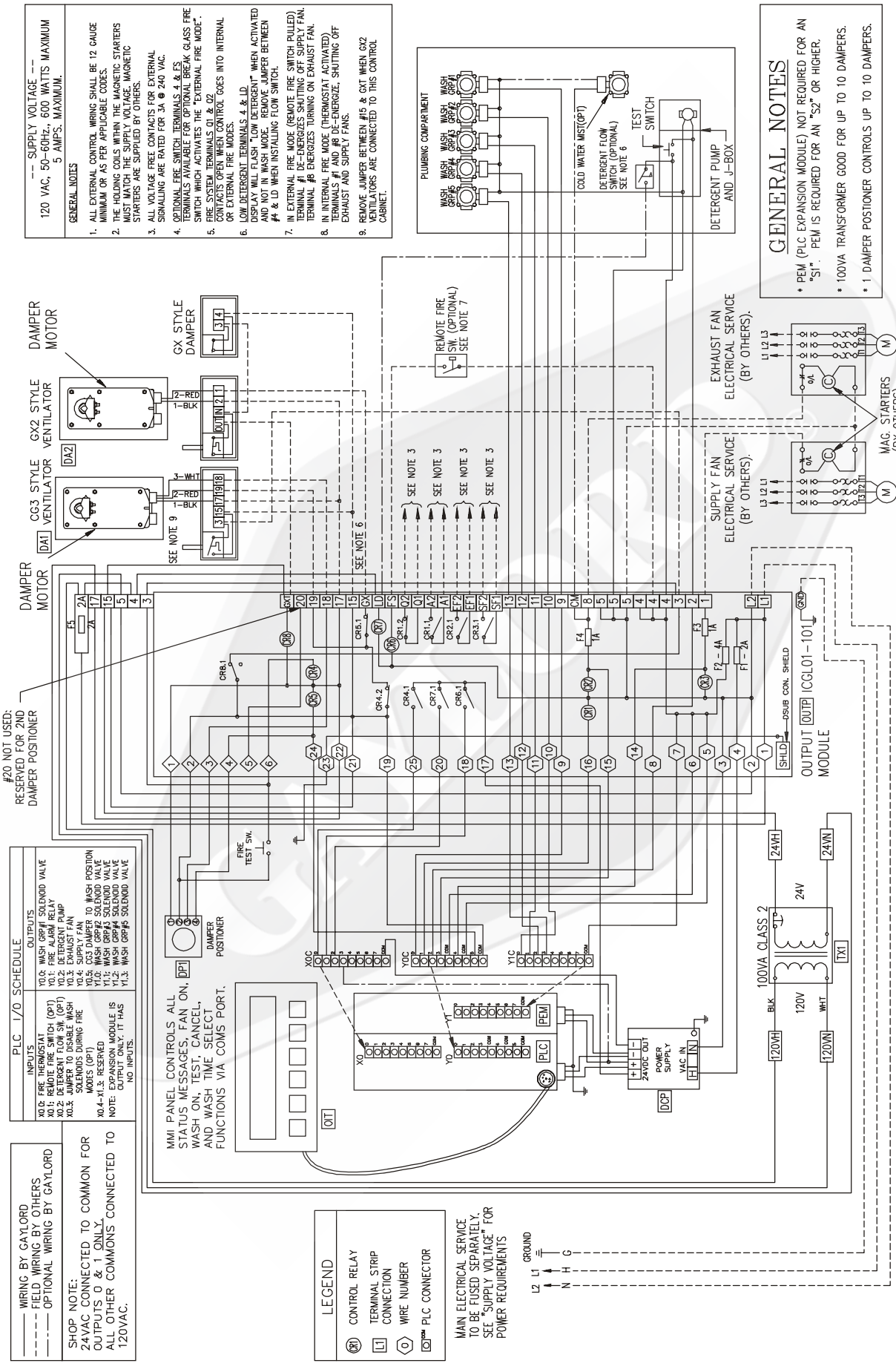
WIRING DIAGRAM FOR MODEL C-6000-10

220 VOLT


-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz., 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALING ARE RATED FOR .3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & F3
TERMINALS FOR NORMALLY OPEN FIRE SUPPRESSION MICROSWITCH AND/OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS Q1 & Q2
CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD
DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED), TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #15 & GXT WHEN GX2 OR N-97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SW. (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY, IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
PLUMBING COMPARTMENT
WASH GRP#1
WASH GRP#2
WASH GRP#3
WASH GRP#4
WASH GRP#5
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
DAMPER MOTOR
GX2 STYLE VENTILATOR
DA2
2-RED
1-BLK
GX STYLE DAMPER
CG3 STYLE VENTILATOR
DA1
3-WHT
2-RED
1-BLK
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 3
SEE NOTE 9
SEE NOTE 6
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
OUTPUT MODULE
ICGL02-100
DSUB CON. SHIELD
FIRE TEST SW.
100VA
24V
120V
TX1
24VH
24VN
BLU
YEL
BLK
WHT
120VH
120VN
500VA
240V
TX2
F7 3.5A
F8 7A
F1 2A
F2 4A
F3 1A
F4 1A
F5 2A
F6 6A
PLC
PEM
POWER SUPPLY
24VDC OUT
VAC IN
DCP
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
L3 L4 GROUND
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR

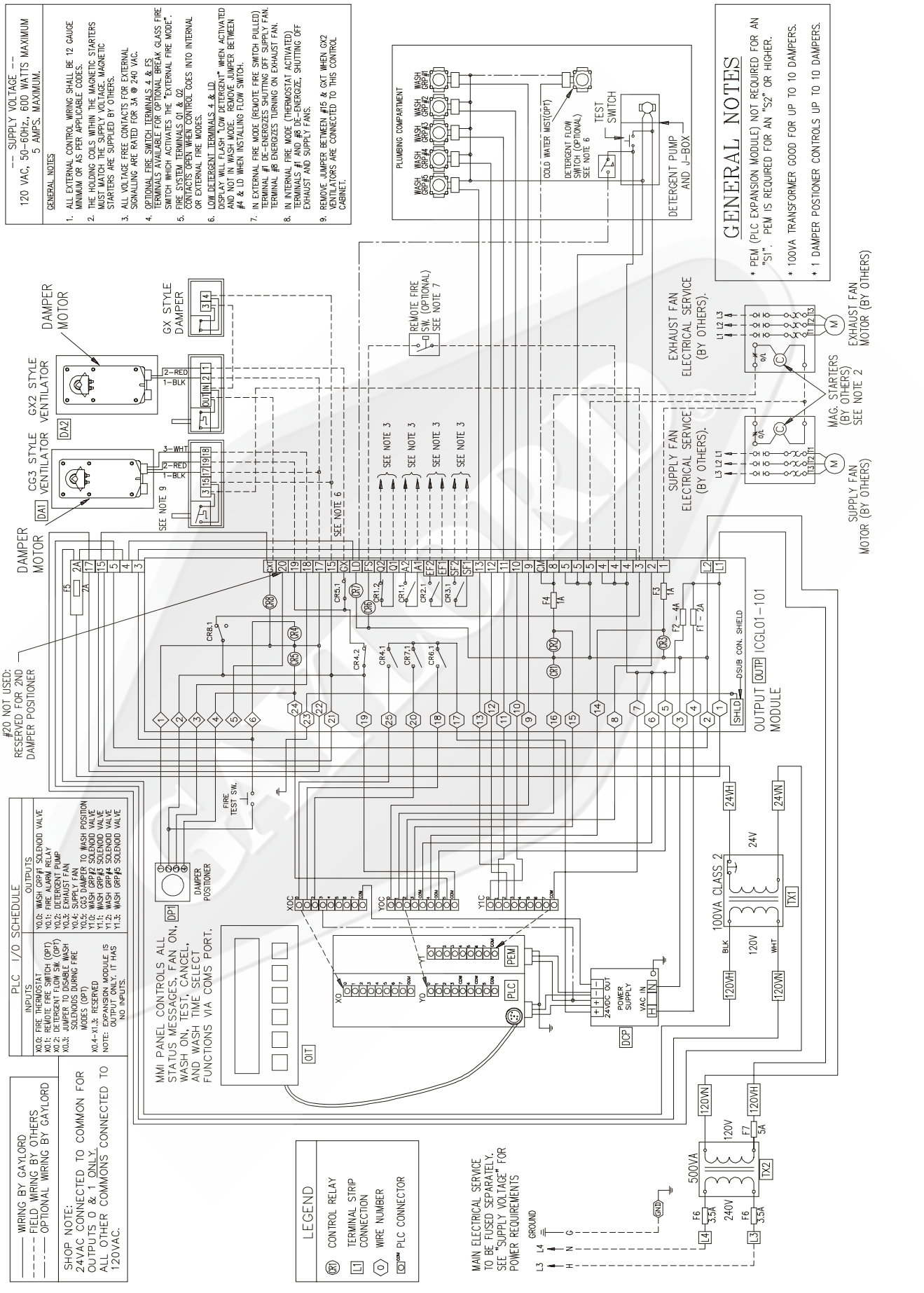
WIRING DIAGRAM FOR MODEL C-6000-10-A

120 VOLT


-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz., 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALLING ARE RATED FOR 3A @ 240 VAC.
4. OPTIONAL FIRE SWITCH TERMINALS 4 & FS TERMINALS AVAILABLE FOR OPTIONAL BREAK GLASS FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE". FIRE SYSTEM TERMINALS 01 & 02 CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. REMOVE JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH PULLED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #6 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #6 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. REMOVE JUMPER BETWEEN #15 & GX7 WHEN GX2 VENTILATORS ARE CONNECTED TO THIS CONTROL CABINET.
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
* 1 DAMPER POSITIONER CONTROLS UP TO 10 DAMPERS.
PLUMBING COMPARTMENT
WASH GRP#1
WASH GRP#2
WASH GRP#3
WASH GRP#4
WASH GRP#5
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
DAMPER MOTOR
DA1
CG3 STYLE VENTILATOR
DA2
GX2 STYLE VENTILATOR
GX STYLE DAMPER
2-RED
1-BLK
3-WHT
SEE NOTE 9
SEE NOTE 6
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 3
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
#20 NOT USED: RESERVED FOR 2ND DAMPER POSITIONER
PLC I/O SCHEDULE
INPUTS
XO.0: FIRE THERMOSTAT
XO.1: REMOTE FIRE SWITCH (OPT)
XO.2: DETERGENT FLOW SW. (OPT)
XO.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
XO.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY, IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
DAMPER POSITIONER
FIRE TEST SW.
OUTPUT MODULE
ICGL01-101
DSUB CON. SHIELD
100VA CLASS 2
24V
120V
BLK
WHT
TX1
POWER SUPPLY
24VDC OUT
VAC IN
PLC
PEM
DCP
OIT
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
GROUND
L2 L1
H
N
G

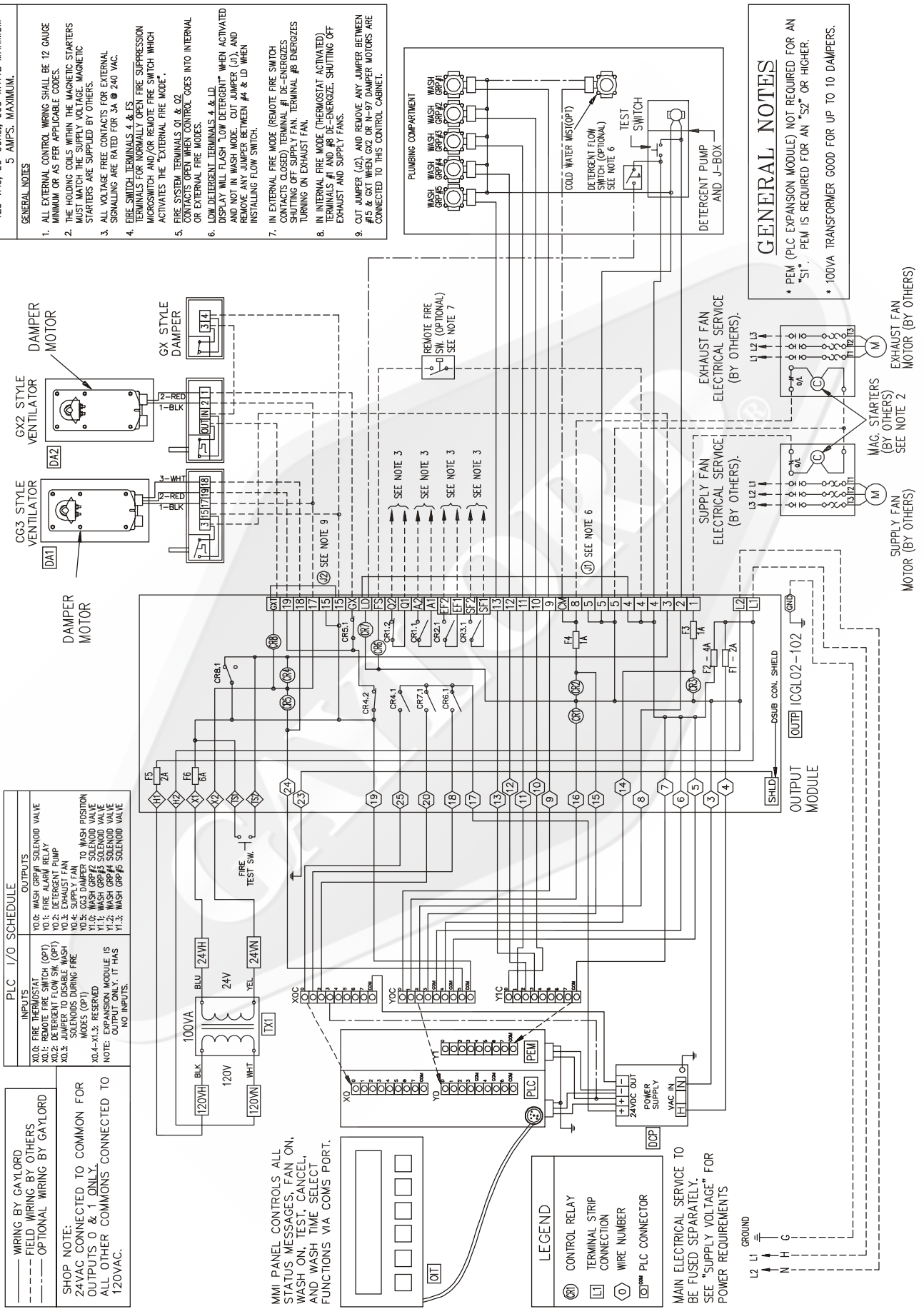
WIRING DIAGRAM FOR MODEL C-6000-10-A

220 VOLT


-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz, 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALING ARE RATED FOR 3A @ 240 VAC.
4. OPTIONAL FIRE SWITCH TERMINALS 4 & FS TERMINALS AVAILABLE FOR OPTIONAL BREAK GLASS FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS 01 & 02 CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. REMOVE JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH PULLED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. REMOVE JUMPER BETWEEN #15 & GX1 WHEN GX2 VENTILATORS ARE CONNECTED TO THIS CONTROL CABINET.
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
* 1 DAMPER POSITIONER CONTROLS UP TO 10 DAMPERS.
PLUMBING COMPARTMENT
WASH GRP#6
WASH GRP#5
WASH GRP#4
WASH GRP#3
WASH GRP#2
WASH GRP#1
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
DAMPER MOTOR
CG3 STYLE VENTILATOR
DA1
GX2 STYLE VENTILATOR
DA2
GX STYLE DAMPER
SEE NOTE 9
SEE NOTE 6
SEE NOTE 3
#20 NOT USED: RESERVED FOR 2ND DAMPER POSITIONER
FIRE TEST SW.
DAMPER POSITIONER
DP1
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
OIT
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SWITCH (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY. IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
OUTPUT ICGL01-101 MODULE
DSUB CON. SHIELD
F1 - 2A
F2 - 4A
F3 1A
F4 1A
F5 2A
F6 3.5A
F7 5A
100VA CLASS 2
500VA
24V
120V
240V
24VH
24VN
120VH
120VN
TX1
TX2
POWER SUPPLY
24VDC OUT
VAC IN
DCP
PLC
PEM
XOC
YOC
YIC
XO
YO
YI
GND
GROUND
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.

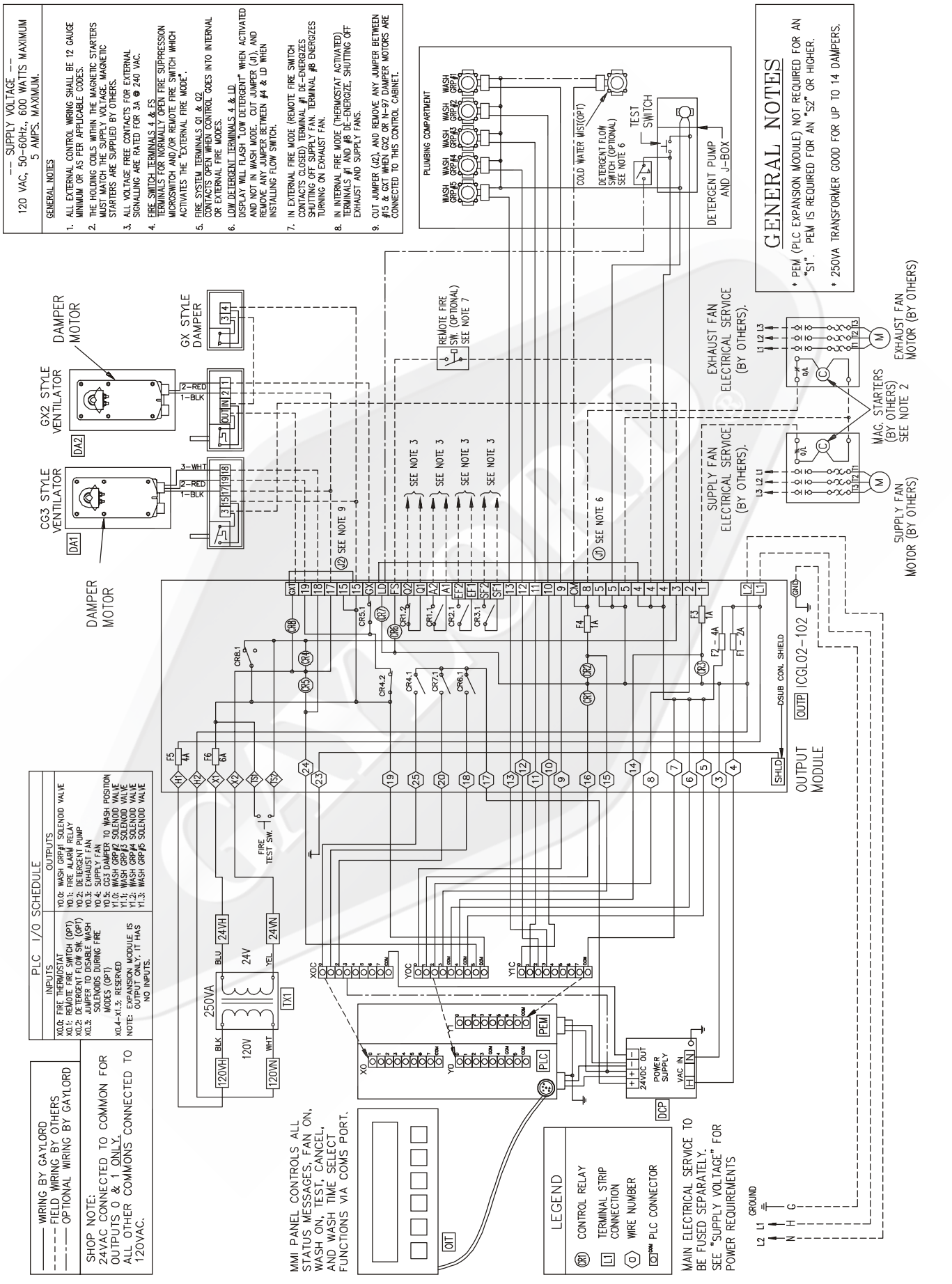
WIRING DIAGRAM FOR MODEL C-6000-10-B

120 VOLT


-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz., 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALING ARE RATED FOR 3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & FS
TERMINALS FOR NORMALLY OPEN FIRE SUPPRESSION MICROSWITCH AND/OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS O1 & O2
CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD
DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #15 & GXT WHEN GX2 OR N-97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SW. (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY. IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.
PLUMBING COMPARTMENT
WASH GRP#1
WASH GRP#2
WASH GRP#3
WASH GRP#4
WASH GRP#5
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
GX STYLE DAMPER
GX2 STYLE VENTILATOR
CG3 STYLE VENTILATOR
DAMPER MOTOR
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 3
SEE NOTE 9
SEE NOTE 6
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
OUTPUT MODULE
ICGL02-102
DSUB CON. SHIELD
100VA
120V
24V
FIRE TEST SW.
PEM
PLC
POWER SUPPLY
24VDC OUT
VAC IN
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
GROUND

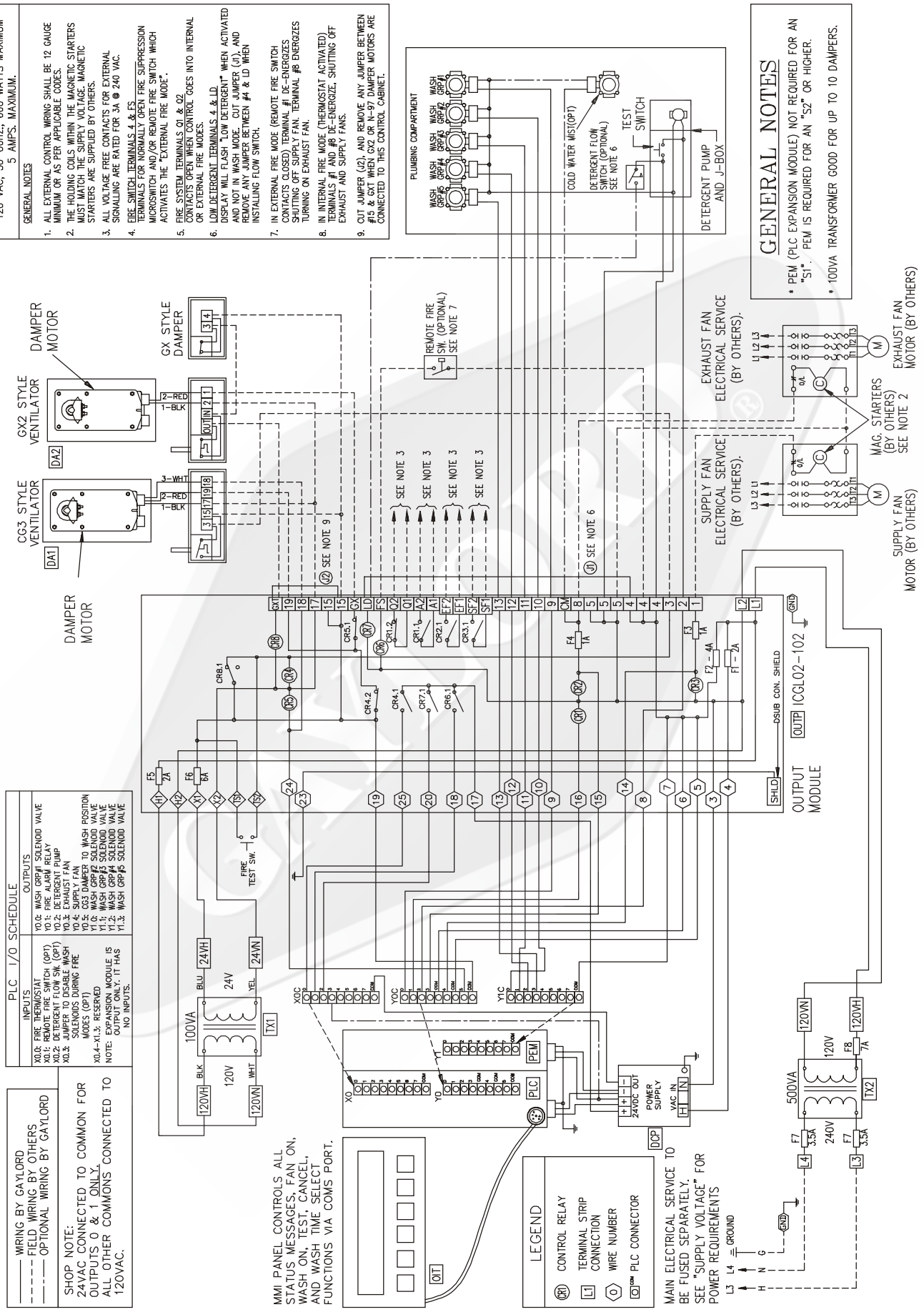
WIRING DIAGRAM FOR MODEL C-6000-20-B

120 VOLT


GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALLING ARE RATED FOR 3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & F5 TERMINALS FOR NORMALLY OPEN FIRE SUPPRESSION MICROSWITCH AND/OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS Q1 & Q2 CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #5 & GX1 WHEN GX2 OR N-97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.
— SUPPLY VOLTAGE —
120 VAC, 50-60Hz., 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 250VA TRANSFORMER GOOD FOR UP TO 14 DAMPERS.
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SW (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY. IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: SUPPLY FAN
Y0.4: EXHAUST FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY, SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
GROUND
DAMPER MOTOR
GX2 STYLE VENTILATOR
CG3 STYLE VENTILATOR
GX STYLE DAMPER
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 3
SEE NOTE 6
SEE NOTE 9
PLUMBING COMPARTMENT
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
OUTPUT MODULE
ICCL02-102
DSUB CON. SHIELD
FIRE TEST SW.
250VA
120V
24V
TX1
PLC
PEM
POWER SUPPLY
24VDC OUT
VAC IN

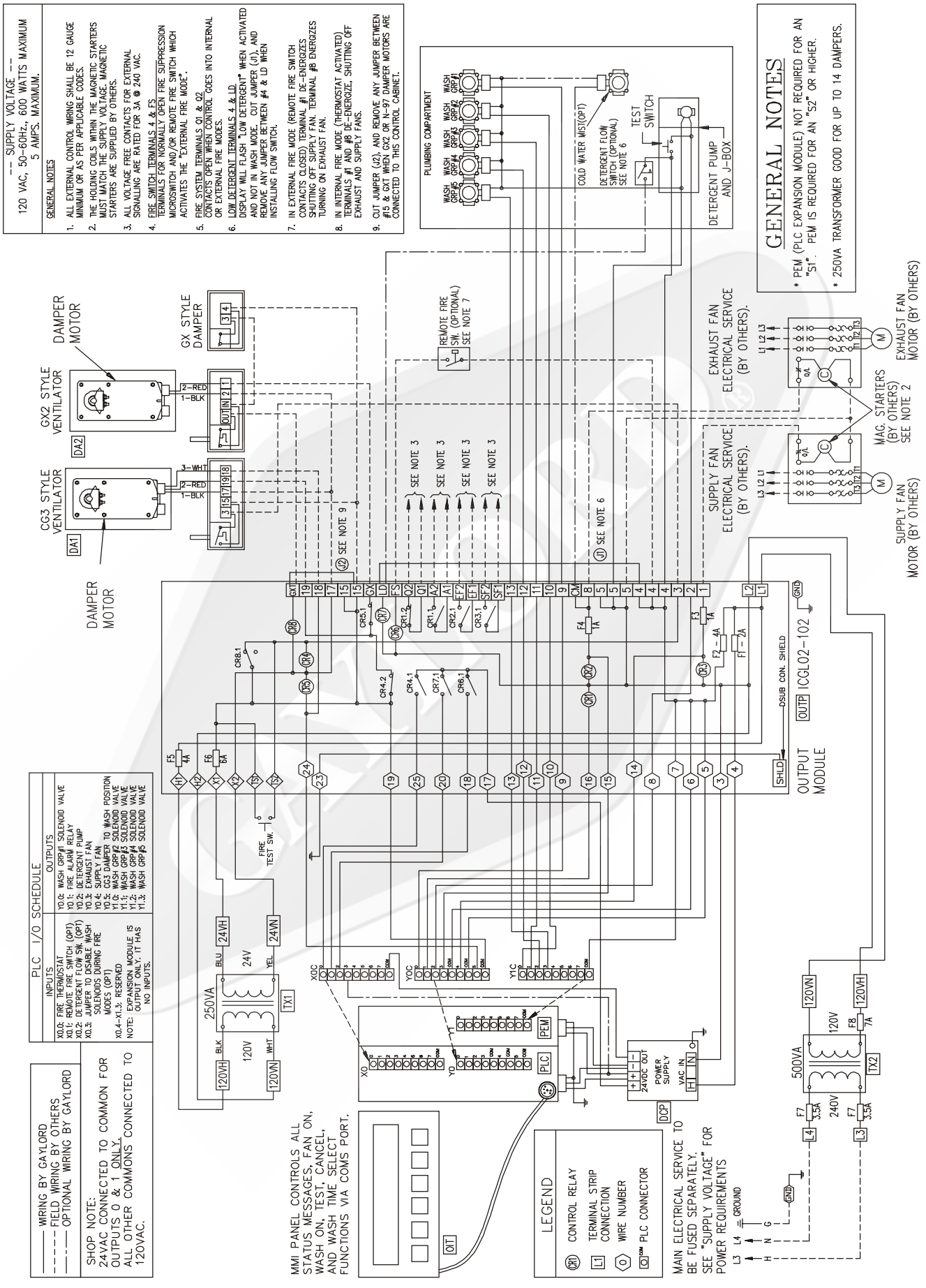
WIRING DIAGRAM FOR MODEL C-6000-10-B

220 VOLT

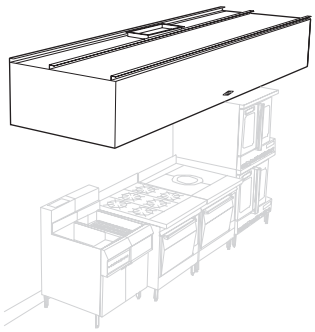

-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz., 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALING ARE RATED FOR 3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & FS TERMINALS FOR NORMALLY OPEN FIRE SUPPRESSION MICROSWITCH AND/OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS 01 & 02 CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #15 & GXT WHEN GX2 OR N-97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SW. (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY, IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.0: WASH GRP#2 SOLENOID VALVE
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
L3 L4 GROUND
H N G L
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 100VA TRANSFORMER GOOD FOR UP TO 10 DAMPERS.
PLUMBING COMPARTMENT
WASH GRP#1
WASH GRP#2
WASH GRP#3
WASH GRP#4
WASH GRP#5
COLD WATER VLV(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
DAMPER MOTOR
GX2 STYLE VENTILATOR
DA2
2-RED
1-BLK
GX STYLE DAMPER
CG3 STYLE VENTILATOR
DA1
3-WHT
2-RED
1-BLK
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 3
SEE NOTE 9
J2
J1 SEE NOTE 6
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
OUTPUT MODULE
DSUB CON. SHIELD
OUTP ICGL02-102
FIRE TEST SW.
100VA
120V
24V
TX1
120VH
120VN
BLK
WHT
BLU
YEL
24VH
24VN
PLC
PEM
POWER SUPPLY
24VDC OUT
VAC IN
DCP
OIT
500VA
240V
TX2
F1 - 2A
F2 - 4A
F3 1A
F4 1A
F5 2A
F6 6A
F7 3.5A
F8 7A

WIRING DIAGRAM FOR MODEL C-6000-20-B

220 VOLT

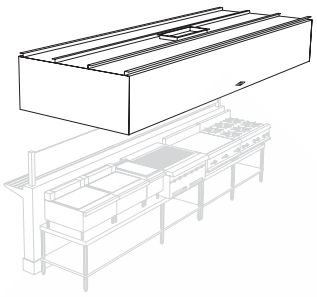

-- SUPPLY VOLTAGE --
120 VAC, 50-60Hz, 600 WATTS MAXIMUM
5 AMPS. MAXIMUM.
GENERAL NOTES
1. ALL EXTERNAL CONTROL WIRING SHALL BE 12 GAUGE MINIMUM OR AS PER APPLICABLE CODES.
2. THE HOLDING COILS WITHIN THE MAGNETIC STARTERS MUST MATCH THE SUPPLY VOLTAGE. MAGNETIC STARTERS ARE SUPPLIED BY OTHERS.
3. ALL VOLTAGE FREE CONTACTS FOR EXTERNAL SIGNALLING ARE RATED FOR 3A @ 240 VAC.
4. FIRE SWITCH TERMINALS 4 & F5
TERMINALS FOR NORMALLY OPEN FIRE SUPPRESSION MICROSWITCH AND/OR REMOTE FIRE SWITCH WHICH ACTIVATES THE "EXTERNAL FIRE MODE".
5. FIRE SYSTEM TERMINALS Q1 & Q2
CONTACTS OPEN WHEN CONTROL GOES INTO INTERNAL OR EXTERNAL FIRE MODES.
6. LOW DETERGENT TERMINALS 4 & LD
DISPLAY WILL FLASH "LOW DETERGENT" WHEN ACTIVATED AND NOT IN WASH MODE. CUT JUMPER (J1), AND REMOVE ANY JUMPER BETWEEN #4 & LD WHEN INSTALLING FLOW SWITCH.
7. IN EXTERNAL FIRE MODE (REMOTE FIRE SWITCH CONTACTS CLOSED) TERMINAL #1 DE-ENERGIZES SHUTTING OFF SUPPLY FAN. TERMINAL #8 ENERGIZES TURNING ON EXHAUST FAN.
8. IN INTERNAL FIRE MODE (THERMOSTAT ACTIVATED) TERMINALS #1 AND #8 DE-ENERGIZE, SHUTTING OFF EXHAUST AND SUPPLY FANS.
9. CUT JUMPER (J2), AND REMOVE ANY JUMPER BETWEEN #5 & GXT WHEN GX2 OR N-97 DAMPER MOTORS ARE CONNECTED TO THIS CONTROL CABINET.
PLUMBING COMPARTMENT
WASH GRP#5
WASH GRP#4
WASH GRP#3
WASH GRP#2
WASH GRP#1
COLD WATER MIST(OPT)
DETERGENT FLOW SWITCH (OPTIONAL) SEE NOTE 6
TEST SWITCH
DETERGENT PUMP AND J-BOX
GENERAL NOTES
* PEM (PLC EXPANSION MODULE) NOT REQUIRED FOR AN "S1". PEM IS REQUIRED FOR AN "S2" OR HIGHER.
* 250VA TRANSFORMER GOOD FOR UP TO 14 DAMPERS.
PLC I/O SCHEDULE
INPUTS
X0.0: FIRE THERMOSTAT
X0.1: REMOTE FIRE SWITCH (OPT)
X0.2: DETERGENT FLOW SW. (OPT)
X0.3: JUMPER TO DISABLE WASH SOLENOIDS DURING FIRE MODES (OPT)
X0.4-X1.3: RESERVED
NOTE: EXPANSION MODULE IS OUTPUT ONLY. IT HAS NO INPUTS.
OUTPUTS
Y0.0: WASH GRP#1 SOLENOID VALVE
Y0.1: FIRE ALARM RELAY
Y0.2: DETERGENT PUMP
Y0.3: EXHAUST FAN
Y0.4: SUPPLY FAN
Y0.5: CG3 DAMPER TO WASH POSITION
Y1.1: WASH GRP#3 SOLENOID VALVE
Y1.2: WASH GRP#4 SOLENOID VALVE
Y1.3: WASH GRP#5 SOLENOID VALVE
WIRING BY GAYLORD
FIELD WIRING BY OTHERS
OPTIONAL WIRING BY GAYLORD
SHOP NOTE:
24VAC CONNECTED TO COMMON FOR OUTPUTS 0 & 1 ONLY.
ALL OTHER COMMONS CONNECTED TO 120VAC.
DAMPER MOTOR
CG3 STYLE VENTILATOR
DA1
GX2 STYLE VENTILATOR
DA2
GX STYLE DAMPER
REMOTE FIRE SW. (OPTIONAL) SEE NOTE 7
SEE NOTE 3
SEE NOTE 9
SEE NOTE 6
EXHAUST FAN ELECTRICAL SERVICE (BY OTHERS).
SUPPLY FAN ELECTRICAL SERVICE (BY OTHERS).
MAG. STARTERS (BY OTHERS) SEE NOTE 2
EXHAUST FAN MOTOR (BY OTHERS)
SUPPLY FAN MOTOR (BY OTHERS)
OUTPUT MODULE
DSUB CON. SHIELD
ICGL02-102
FIRE TEST SW.
250VA
120V
24V
TX1
500VA
240V
TX2
POWER SUPPLY
24VDC OUT
VAC IN
PLC
PEM
DCP
OIT
MMI PANEL CONTROLS ALL STATUS MESSAGES, FAN ON, WASH ON, TEST, CANCEL, AND WASH TIME SELECT FUNCTIONS VIA COMS PORT.
MAIN ELECTRICAL SERVICE TO BE FUSED SEPARATELY. SEE "SUPPLY VOLTAGE" FOR POWER REQUIREMENTS
GROUND
LEGEND
CONTROL RELAY
TERMINAL STRIP CONNECTION
WIRE NUMBER
PLC CONNECTOR

STANDARD VENTILATOR MODELS



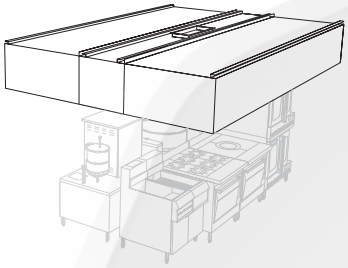
Model CG3-BDL

Application - Wall mounted canopy style for all types of equipment.



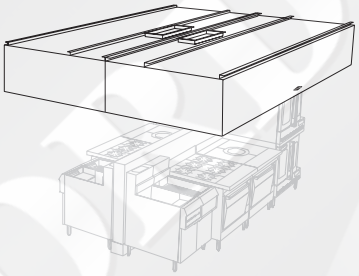
Model CG3-BDL-CL

Application - For single island arrangements



Model CG3-BDL-DS

Application - For island style cooking arrangements where one side of the cooking line is light duty equipment and the other side medium duty equipment.

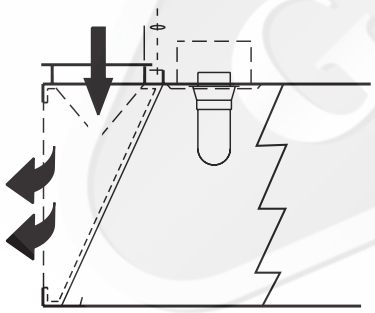


Model CG3-BDL-BB

Application - For island style cooking arrangements over all duties of equipment.

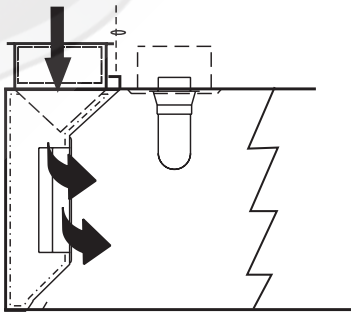
STANDARD MAKE-UP AIR OPTIONS

The make-up air options shown below are available on all BDL Series Ventilators. Except the MAI Series is not available on the CG3-BDL-CL.



MODEL "MAW" SERIES
FRONT FACE DISCHARGE

This method of introducing make-up air into the kitchen is flexible and has many advantages. Make-up air is discharged through stainless steel perforated panels as illustrated (MAW Series) or optional registers. Typical supply volume is 80% of the exhaust or more, depending on air balance desired. Supply air temperatures should range from 60 to 65°F (16 to 18°C), but may be as low as 50°F (10°C) depending on air volume, distribution, and internal heat load.



MODEL "MAI" SERIES
INTERNAL DISCHARGE

This method of introducing air into the hood is typically referred to as the "short circuit" method. This design has very limited applications and the amount of supply air able to be introduced varies considerably with the type of cooking equipment. This air may be untempered air in most areas depending upon climatic conditions and the type of cooking equipment. The difference between the quantity of air being introduced and the amount of air being exhausted must be supplied through a traditional make-up air system.

METRIC CONVERSION CHART

DIMENSIONS (Feet and Inches)

TO CONVERT	TO	MULTIPLY BY
in	mm	25.4
in	cm	2.54
mm	in	0.03937
cm	in	0.3937
ft	cm	30.48
ft	m	0.3048
cm	ft	0.0328
m	ft	3.2808

STANDARD CONVERSIONS

One meter = 10 dm
One meter = 100 cm
One meter = 1000 mm
one in. = 25.40 mm
one ft. = 304.80 mm

AIR VELOCITY

TO CONVERT	TO	MULTIPLY BY
FPM	m/s	0.00508
m/s	FPM	196.85

AIR VOLUME

TO CONVERT	TO	MULTIPLY BY
CFM	m^3/sec	0.000472
CFM	m^3/min	0.02832
CFM	m^3/hr	1.70
CFM	Ltrs/sec	0.472
m^3/sec	CFM	2118.88
m^3/min	CFM	35.31
m^3/hr	CFM	0.5886

STATIC PRESSURE

TO CONVERT	TO	MULTIPLY BY
in. W.G	N/m^2	248.84
N/m^2	in. W.G.	0.004

STANDARD CONVERSIONS

1.00" W.G. = 248.84 N/m^2
or 248.84 Pascals (Pa)
or 2.49 Millibars
1.33" W.G. = 331 N/m^2 or 331 Pa
1.50" W.G. = 373 N/m^2 or 373 Pa
1.65" W.G. = 411 N/m^2 or 411 Pa
1.70" W.G. = 423 N/m^2 or 423 Pa

WATER FLOW/VOLUME

TO CONVERT	TO	MULTIPLY BY
U.S. ounce	Liters	.02958
U.S. gal	Liters	3.785
Liters	U.S. gal	0.2642
GPM	L/s	0.0631
L/s	GPM	15.850

STANDARD CONVERSIONS

one U.S. gal. = 3.785 Liters
one Liter = 0.2642 U.S. Gal.
one GPM/ft. = 0.063 L/s/ft.
or 0.207 L/s/m
one U.S. gal. = 0.833 Imperial Gal.
one Imperial Gal. = 4.546 Liters

WATER PRESSURE

TO CONVERT	TO	MULTIPLY BY
psi	kg/m^2	703.1
psi	kg/cm^2	0.0703
kg/m^2	psi	0.0014
kg/cm^2	psi	14.223

STANDARD CONVERSIONS

40 psi = 2.8 kg/cm^2 = 275.8 Kpa = 2.758 BAR
80 psi = 5.6 kg/cm^2 = 551.6 Kpa = 5.516 BAR

TEMPERATURE

TO CONVERT	TO	USE FORMULA
°C	°F	$°F = (°C \cdot 1.8) + 32$
°F	°C	$°C = (\frac{°F - 32}{1.8})$

STANDARD CONVERSIONS

140°F. to 180°F. = 60°C. to 82°C.

WEIGHT

TO CONVERT	TO	MULTIPLY BY
lbs.	N	4.448
lbs.	kg	0.4536
N	lbs	0.2248
kg	lbs	2.2046

PIPE SIZE

U.S. STANDARD PIPE SIZES		STANDARD METRIC EQUIVALENT PIPE SIZE
1/2"	=	15 mm
3/4"	=	20 mm
1"	=	25 mm
1-1/4"	=	32 mm
1-1/2"	=	40 mm
2"	=	50 mm

LEGEND

in.	=	inches	Pa.	=	Pascals	FPM	=	feet per minute
ft.	=	feet	U.S. gal.	=	U.S. gallon	m/s	=	meters per second
mm	=	milimeters	GPM	=	gallons per minute	in. W.G.	=	inches water gauge
cm	=	centimeters	L/s	=	liters per second	N	=	Newtons
dm	=	decimeters	Kpa	=	1000 Pascals	N/m^2	=	Newtons per square meter
CFM	=	cubic feet per minute	psi	=	pounds per square inch	°C.	=	degrees Celsius
m^3/s	=	cubic meters per second	kg/m^2	=	kilograms per square meter	BAR	=	one atmospheric pressure meter
L	=	Liters	°F.	=	degrees Fahrenheit			(1000 millibars = 14.7 psi)

VENTILATOR START-UP INSPECTION REPORT

For Model "CG3" Series Ventilators with C-6000 Series Control

Job Name _____

Address _____

_____
City/State Zip

Facility Contact Name _____ Phone # _____

Gaylord Representative _____

Representative Company Name _____

File Number _____ Date _____

CSA Contacted _____

MAKE-UP AIR

1. Kitchen make-up air supply is turned on_____Yes_____No
2. Type of make-up air
   - ☐ Ceiling Registers ☐ Built into Hood
   - ☐ Ceiling Linear Diffusers ☐ Other
3. If ceiling register or linear diffusers approximate distance from face of hood

   _____

AIR VOLUME READINGS

Push **"Start Fan"** and take velocities. Record as follows: **Exhaust** record in the **"EX"** row, **Exhaust at Custom Air** baffles (if applicable) record in the **"CA"** row, and **Make-up Air** record in the **"MA"** row.

ITEM NO.	HOOD SERIAL NO.		AIR VELOCITIES (FPM) FROM LEFT TO RIGHT HOOD SLOT, FILTER BANK OR MAKE-UP AIR DISCHARGE				AVERAGE
		EX					
		CA					
		MA					
		EX					
		CA					
		MA					
		EX					
		CA					
		MA					

WASH MODE TEST:

1. Model of Control Cabinet _____
2. Push "START WASH" on Control Cabinet. Check the following:
   - A. Exhaust fan off_____Yes_____No
   - B. Damper closes to the front of the hood after approx. 70 sec.____Yes ____No
   - C. Water turned on_____Yes_____No
   - D. All nozzles spraying_____Yes_____No
   - E. Green light is on and "Wash On" is displayed on C-6000 command center____Yes ____No
   - F. Detergent pump operating ____Yes ___ No
   - G. Length of wash cycle _____Minutes
   - H. Water pressure_____PSI
   - I. Water temperature_____°F
   - J. Any ventilator leaks_____Yes_____No
   - K. Drains free and clear_____Yes_____No
   - L. Brand of detergent used_____
3. At the conclusion of check A through L above, push the "EXIT" button on the C-6000 command center. Check the following: A. Did the water shut off ___Yes ___No B. Did the damper stay closed ___Yes ___No
4. Push "START FAN". Check the following:
   - A. Green light comes on and "Fan On" is displayed on C-6000 command center___Yes ___No
   - B. Damper fully opens after approx. 45 seconds ___Yes ___No

FIRE MODE TEST:

CAUTION: Before any fire tests are performed, check with building superintendent to see if Gaylord control cabinet is tied into building alarm, monitoring system and/or Fire Department.

THERMOSTAT TEST (For CG3, CG3-FDL, and CG3-FDT)

With the exhaust fan on, open electrical compartment on Control Cabinet and push and hold for 20 seconds the "Fire Test Switch". The following should occur:

1. Damper closed to rear_____Yes_____No (N/A on CG3-FDL and CG3-FDT)
2. Water turned on_____Yes_____No
3. Exhaust fan shut off_____Yes_____No
4. Steady red light on and "Fire In Hood" displayed on C-6000 Command Center ____Yes ___No

NOTE: Water will continue to run for 5 minutes after the "Fire Test Switch" button is released. The water may be shut off prior to the end of the cool down cycle by pushing the "EXIT" button on the C-6000 command center.

Upon completion of the thermostat test push the "EXIT" button on the C-6000 command center. The following should occur:

- A. Water shut off ___Yes ___No
- B. Damper closes to front ___Yes ___No (N/A on CG3-FDL and CG3-FDT)
- C. Steady red light turned off and "Fan Off" displayed on C-6000 Command Center___Yes ___No

REMOTE FIRE SWITCH TEST (Optional Equipment):_____Equipped_____Not Equipped

Open fire switch and flip toggle switch to the "ALARM" or "TEST" position. The following should occur:

1. Water spray turned on_____Yes_____No
2. Damper remained open (or opens) ____Yes____No
3. Exhaust fan remained on (or turned on)____Yes____No
4. Flashing red light on and "Ext. Fire Active" displayed on C-6000 Command Center _____Yes_____No

INSTALLATION INCLUDES THE FOLLOWING:

- ☐ Gaylord Heat Reclaim Unit (HRU)
- ☐ Gaylord Clearair Pollution Control Unit (RSPC)
- ☐ Gaylord Distributor (UDS)
- ☐ Gaylord Recirculating Wash System (GRW)
- ☐ The Gaylord "Quencher" Fire Protection System
- ☐ Gaylord Rooftop Unit (GRT)
- ☐ Wet Chemical Fire Protection System

Personnel provided with ventilator technical manual_____Yes_____No

Inspection Witnessed By (Print Name) _____

Signature _____ Date _____

Comments _____

_____

_____

_____

_____

Distribution: WHITE-Gaylord Industries, Inc. YELLOW-Customer PINK-Dealer GOLDENROD-Sales Rep Litho U.S.A.

GAYLORD INDUSTRIES, 10900 S.W. Avery Street • Tualatin, OR 97062-1149
PHONE:1-800-547-9696 • FAX: 1-503-692-6048 • email:info@gaylordusa.com

THE GAYLORD WATER-WASH VENTILATOR LIMITED WARRANTY

August 2000

The Gaylord Ventilator and component parts furnished with The Gaylord Ventilator are warranted to be free from defects of material and workmanship under normal use when installed, operated and serviced in accordance with factory recommendation. Rubber and synthetic rubber parts such as "O" rings, diaphragms and poppet checks are perishable when caustic cleaning solutions are used and, therefore, are not covered by this warranty.

The Manufacturer's obligation under this warranty and any warranties implied by law shall be limited to repairing or replacing at its option any part of said equipment when either Gaylord Industries, Inc. or the Licensed Gaylord Manufacturer's examination shall disclose to its satisfaction to be thus defective, for a period of one (1) year from the date of beneficial use, or eighteen months from date of shipment, whichever occurs first, provided proper and acceptable evidence of such is recorded at the factory. GAYLORD INDUSTRIES, INC. AND THE LICENSED GAYLORD MANUFACTURER SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM A BREACH OF THIS WARRANTY.

In the United States, the labor required to make repairs and replacements under this warranty shall be furnished by Gaylord Industries, Inc. or the Licensed Gaylord Manufacturer or its authorized representative. Such labor shall only be provided Mondays through Fridays during the hours between 8 a.m. and 4 p.m. Requests for repairs or replacement parts should be made to GAYLORD INDUSTRIES, P.O. Box 1149, Tualatin, Oregon 97062-1149.

Outside the United States, all replacement parts furnished under this warranty shall be F.O.B. Gaylord Industries, Inc., Tualatin, Oregon U.S.A. The owner shall pay the necessary freight delivery charges, and necessary labor for removal and installation of parts, and any tariffs, duties or taxes.

Component parts not manufactured by Gaylord Industries, Inc., such as electrical switches, solenoid coils, relays, etc., shall be warranted under the terms and conditions of the warranty published by the manufacturer of said component parts.

This warranty does not cover routine maintenance such as detergent replacement and inspection of the cleaning system as spelled out in The Gaylord Ventilator Technical Manual. This warranty also does not cover malfunctions or improper operation caused by inadequate hot water, low water pressure, fluctuating electrical power or power surges, waste stoppages, and improper exhaust fan operation.

This is the sole warranty with respect to the aforesaid items. NEITHER GAYLORD INDUSTRIES, INC. OR THE GAYLORD LICENSED MANUFACTURER OR ANY OTHER PARTY MAKES ANY OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEED THE AFORESAID OBLIGATIONS ARE HEREBY DISCLAIMED AND EXCLUDED FROM THIS AGREEMENT.

WORLDWIDE SALES, MANUFACTURING AND SERVICE

FOR THE NAME AND LOCATION OF THE NEAREST CERTIFIED SERVICE AGENCY, VISIT OUR WEB SITE:

WWW.GAYLORDUSA.COM

OR CONTACT US AT:

GAYLORD INDUSTRIES

10900 S.W. AVERY STREET
TUALATIN, OREGON 97062-1149 U.S.A
Phone: 503-691-2010
1-800-547-9696
Fax: 503-692-6048
email: info@gaylordusa.com

LOCAL SERVICE AGENCY

FORM NO. TM-CG3 0304/30507
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